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UNIVERSITY OF ALBERTA

Curriculum in a New Weave

by

Karen Reynolds

A thesis

submitted to the Faculty of Graduate Studies and Research

in partial fulfillment of the requirements for the degree of

Master of Education

Department of Elementary Education

Edmonton, Alberta

Fall, 1990

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UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled, "Curriculum in a New Weave", submitted by Karen Reynolds in partial fulfillment of the requirements for the degree of Master of Education.

Dr. Daiyo Sawada (Supervisor)

Dr. Janis Blakey

Dr. Larry Beauchamp

Date: October 9, 1990

Dedication

To Lee-Anna

who begins the next generation of special people in my life and who, with Scott and Dylan, makes the struggle for quality education and survival of the planet somehow worthwhile.

Abstract

This is a weaving and a curriculum conference where the experiences of weaving and learning to weave become ground for exploring the metaphor of curriculum in a new weave. Four weavers are interviewed, my experiences shown, and the weaving and teaching worlds of others are woven into the cloth that is the conference. An exploration of recursion as a dynamic view of life and of metaphor as a way to explore sets the warp for weaving and curriculum. This becomes a tapestry or a transparency woven into and out of the personal experiences of the weavers and teachers set as warp for the understanding of how curriculum-as-plan could become curriculum-as-lived. Weaving words are explored as a way to see teaching and learning. A new view of curriculum includes the life of weaving and learning to weave. The conference experience is taken to "home" teachers as a broadened experience of curriculum-as-lived. The interactions between student, teacher, and curriculum plan become the warp and the weft of understanding for a view where curriculum-as-transparent-warp could become opportunity for recursion to happen where the student is allowed to weave his/her curriculum-as-lived.

Acknowledgements

Thanks to all the weavers, teachers, and learners that crossed the warp of this conference with the weft of their presence.

Recursive Thanks:

To Daiyo Sawada, for your flashes of insight, and incredible interest in my work, for those oft-needed perturbations and perseverance and the perpetual revisions/recursions, and for the kick-starts and sparks that pushed this thesis to emerge. Thanks for setting a strong, transparent warp for my weaving.

To the community from which this thesis was born — for the well-turned phrases, inspirational insights, and encouraging words that were definite perturbations and ultimate challenges.

To Daiyo Sawada for bringing forth a structural seed,
to Darlene Witte for showing metaphor and recursion as complementarities,
and to Catherine Creery for so willingly joining the fray.

To Martha Thompson, Beany Dootjes, Joan Clift, and Tawa LaFollette for, as in the past, coming forward so willingly with your support and your personal stories to weave into essence for my conference.

To Rod Reynolds for knowing and noticing, being with me all ways.
To Allan and Barb Reynolds for your love and caring, for supporting my efforts.

To Janis Blakey and Larry Beauchamp for your enthusiasm and support and your willingness to walk through my conference with me.

Conference Program

The 1990
Curriculum County Weaving Conference

CURRICULUM IN A NEW WEAVE

Day 1 — Location

Early Conference Reception (Lunch) — Room #1

The commercial exhibits and Looms Display will be open during the entire conference. Coffee and refreshments will be available in each conference room. Enjoy.

Early Bird Demonstration — Room #2

Title: The Navajo Way

A woman who learned to weave the Navajo way tells of how it happened for her and how very young Navajo girls typically learn to weave. Two girls will demonstrate their weaving skills.

Tour #1 — Room #6

Title: Curriculum Metaphors

A tour guide will show you through the library/archives room and comment on the historical displays that represent traditional ways of seeing curriculum. You will be introduced to the problem for this conference: finding a new curriculum metaphor.

Tour #2 — Room #14

Title: Weaving Through Recursion

From the halls of curriculum metaphors you will be guided into the research lab/weaving studio via displays that show the various ways to view life, where recursion research will be presented through a labyrinth of real life displays.

DINNER

Guest Speaker — Room #21

Title: Weaving with Metaphor

Metaphor will be explored historically and then beyond the traditional as a significant way to combine the two elements of our conference: weaving and curriculum.

Business Meeting — Room #25

Title: Metaphor as Method

A short business meeting will outline and provide opportunity to discuss the conference agenda. Any modifications will be presented at this time.

Looms Display — Room #30

Title: Weaving Curriculum

Weaver: Karen

Karen will be available to answer questions as you tour the large variety of looms displayed amidst the products of her looms while you are being introduced to her learning-to-weaving and learning-to-teach-weaving curricula.

Day 2

Session #1 (Choose ONE)

Title: Shaping the Tubes — Room #59

Weaver: Margaret

Weaving huge tubes in various shapes, then shaping them with wires into architectural statements, becomes the curriculum plan for Margaret. This presentation will show you how she took one ideal of what weaving is, and shaped it into a personal statement in three-dimensional art.

Title: Sewing It Up √ — Room #48

Weaver: Joan

From one coat to six years of making coats, this presentation will show you how Joan learned to weave, and grew from weaving coats of one kind to one-of-a-kind coats.

Session #2 (Choose ONE)

Title: Diapers Count, Too √ — Room #53

Weaver: Tawa

You will wonder with Tawa how she can be so involved in weaving, yet does not think of herself as "weaver". Her passion for fibres, the wools and the cottons led her down many paths along side weaving, from raising the sheep to working with textiles.

Title: Shawls and Mohair — Room #59

Weaver: Kris

A passion for farming and raising mohair goats led Kris into the production of shawls and airy jackets that suited the fiber and her style of weaving and living. You will be treated to a vastness of farm ways in viewing her weaving curriculum.

LUNCH

Session #3 (Choose ONE)

Title: Taking the Tests — Room #60

Weaver: Marg

After many years of weaving all sorts of things, Marg grew into the stage of taking the Mastery Weaving tests. This session reveals her trials and tribulations through all of the four levels.

Title: Choosing the Bits √ — Room #60

Weaver: Beany

With a definite plan in mind, Beany has embarked on a three-tiered plan for weaving that is ongoing, part of her life. Her workshop will show us how transparencies and rugs encompass her Self as Weaver.

Session #4 (Choose ONE)

Title: Making the Rainbow — Room #64

Weavers: Marg and Eileen

A workshop using chemical dyes launched these two weavers into the world of color in a new way. You will be treated to a miracle of spectacular color as Marg and Eileen show you how they came to spend their days making it.

Title: Trying It All √ — Room #65

Weaver: Martha

This session will take you into the world of handmade in a new way, showing Martha's conviction that handmade means made with loving care. You will be treated to the down-home goodness of home-grown and handmade that smacks of homemade bread and coziness yet draws you to share her enthusiasm for "doing it all" in weaving.

Commercial Exhibits

Title: Dreaming New Looms — Room #81

Weaver: Everett

From weaving for therapy to dreaming of a new kind of loom, Everett has spent 56 years weaving and building looms. We welcome his contribution to designing and building the loom most western weavers use. His work includes fine weaving of 46, 60, even 120 ends (threads in the warp) per inch.

Title: Weaving to Wear √ — Room #72

Weaver: Anita

That Anita just loves to share her loves will be evident as you become involved in her unique clothing made from squares and rectangles with its obvious personal commitment through its design and embellishment, and its careful construction. Anita will show all the clothes that have happened since she promised herself to weave everything she wore.

Title: Courting the Muse √ — Room #77

Weaver: Virginia

A philosophical approach takes us into the meaning of weaving in the life of this long-time weaver who still considers herself a "hobby" weaver but basks in the freedom to spend long lengths of time in her studio now that the children are grown.

Title: Textured Tapestries — Room #81

Weaver: Joanne Hall

From Mexican tapestry to her personal interpretation of tapestry as a weaving technique-turned-medium, Joanne will show how she has adapted the designs and their execution to directly accommodate her customers' needs and pocket books.

Title: Celebrations of Life √ — Room #79

Weaver: Albertje

The dramatic flair for life Albertje brings to her woven clothing will quite astound those of us who have thought that woven clothing means simply cloth made. She was one of the first to look at clothing as wearable art, and her one-of-a-kind clothing pieces are unique and stunning in their individuality.

DINNER

Fashion Show — Room #82

This is an opportunity for all the weavers at the conference to participate directly in showing their wares. Each weaver will be invited to walk around the room, and across the stage to model their handwoven clothing/garments/ accessories. If you plan to participate, please fill in the enclosed card with your name and the description of the article you intend to wear and deposit it in the fashion show box at the north end of the registration desk.

Movie #1 — Room #82

Title: Living in a Dream

Be ready to be taken to the far East and into the life of a widow with three sons whose sole income is from weaving until she sees a beautiful painting that changes and takes over her life.

Movie #2 — Room #88

Title: Dream Weaver

Still in the East, in a land of riches and beggars, we visit a blind woman, seated on the steps of a Great Temple, weaving dreams for a penny.

Day 3

Session #1 (Choose ONE)

Title: The Classroom in Town √ — Room #95

Leader: Caroline

This short musical presentation will be offered by grade three students who took their local history seriously. The students will present their town history from the point of view of each of the families they have adopted as their own. You will learn their history lessons, but you will also learn how they acquired their vast knowledge.

Title: Interactive Text — Room #105

Leader: Wayne

The computer is the latest and most potent text aid available in our schools. This presentation questions whether we are making full use of its capabilities especially in the sense of remembering that the text presented has vast interactive capability that challenges our whole concept of what "text" is and can be.

Title: Schooling, a Systems Approach — Room #105

Leaders: John and David

The latest information from the field of science challenges our view of how to look at learning in the classroom. The concepts of ecological cooperation, order out of chaos, and chaos out of order will be reviewed and the implications for a new view of teaching explored.

Title: Ecological Perspectives for the Classroom — Room #105

Leader: Elisabet

Knowing that environmental issues are vital to survival, this grade four class has devised a unique way of presenting themselves as ecological advocates in their country school system. You will have an opportunity to talk with the students themselves as they tell about their experiences.

LUNCH

Session #2 (Choose ONE)

Title: The Nature of Creativity in Teaching — Room #105

Leader: Robert

A practical applications approach to creativity in the classroom will open discussion on the nature of creativity and its reverberations in the art/craft of teaching. Our conventional views of creativity as elusive and exclusive may be re-seen as the edges are explored.

Title: Revolving Doors √ — Room #99

Leaders: Julie and Meg

From a two week letter writing assignment, this class of grade fours launched a year-long study of styrofoam misuse that led to local and national recognition. The students are here, armed with their "facts" sheets to tell you their story.

Title: Weaving the The Math Curriculum — Room #105

Leader: Daiyo

There is always one more way to look at a mandated math curriculum — and compare it to the choices for learning a grade two class could follow with an imaginative approach to problem solving through looking at the systems approach to learning math.

Title: Evaluation in the Elementary School — Room #104

Leader: Elliot

Beyond deciding a grade, or a pass/fail designation, Elliot and his colleagues enlarge the choices and go beyond systems analysis and

behavioral objectives to case studies and "goal-free" and "connoisseurship" models as alternative views of evaluation.

Cocktail Hour — Room #104

During this time, you are invited to re-visit the commercial exhibits, or the Looms Display, talk to any of the speakers, students, weavers. Refreshments will be available.

DINNER

Student Presentations

Title: Weaving in the Classroom — Room #105

#1: Doing

Expanding the work of her colleagues, and having developed a workshop format for her eighth grade writing and reading classes, Nancie and her students will offer us a glimpse into how her classroom really works.

#2: Groups — Room #108

Students will tell us of the cooperative approaches to learning that they have found work for them in their classrooms where they have tried games, teams, tournaments, and simple cooperative groupings.

#3: Involving — Room #110

Students from an assortment of schools will relate their experiences of how getting right into the business of learning has resulted in such outward displays as magazines, movies and tray liners while they show us how their skills were enhanced, not neglected.

#4: Evolving — Room #111

These grade six students will show how their work changed over the term as their interests and their work itself changed. Learning to work in groups was an experience in itself.

Post-Conference Meeting — Room #116

During this time, you are invited to join with other conference participants to reflect on the sessions and the metaphor of curriculum in a new weave — to extend the comraderie of the conference and/or to talk of your own work.

After Conference Report: Curriculum as Warp #117

References #128

Appendix A: Handout #136

List of Presenters

Albertje: (Koopman, 1983)

Anita: (Mayer, 1984)

Beany: weaver, interviewed for this conference

Caroline: (Donnan, 1988)

Daiyo: (Sawada, 1989)

David: (Bohm & Peat, 1987; Briggs & Peat, 1984, 1989)

Eileen: weaver, colleague

Elisabet: (Sahtouris, 1989)

Elliot: (Eisner, 1985)

Everett: (Gilmore, 1986)

Gary: teacher, colleague

Joan: weaver, interviewed for this conference

Joanne: (Hall, 1982)

John: (Briggs & Peat, 1984, 1989)

Julie: (Ash & Toomey, 1989)

Karen: Reynolds

Kris: weaver, colleague

Marg: weaver, colleague

Margaret: weaver, colleague

Martha: weaver, interviewed for this conference

Meg: (Ash & Toomey, 1989)

Nancie: (Atwell, 1987)

Robert: (Sternberg, 1988)

Tawa: weaver, interviewed for this conference

Virginia: (West, 1988)

Wayne: teacher, colleague

Curriculum in a New Weave

As educators, we toss words back and forth, the jargon of our community. We speak lightly of curriculum, discipline, evaluation, motivation, plan. We encounter such terms as recursion, metaphor, meaningful experience, critical reflection, or mastery. These can no longer be allowed to lie on the table as a piece of cloth in flat-relief. Depth and richness of possibility in their understanding need to be explored.

This conference will be successful if you, the reader, are drawn to ponder these commonly used words in a new weave, in a new light, and are drawn to expand the horizons of their use.

Enjoy with me.

Day 1

I wandered into the building and looked around. This was obviously a weavers' conference, for the first room I entered was decorated in a light, almost playful, atmosphere of weaving motifs to lure me, and experienced and prospective weavers, into reviewing our conceptions of what weaving is. There were huge mobiles of weaver birds building their nests, children dancing around a May-pole weaving the ribbons in an intricate design, others weaving dandelion wreaths. Huge posters showed back-strap weavers of Guatemala, ancient Egyptians weaving water-tight baskets, and African men perched atop their lookout posts in the dense forest weaving headbands for their ceremonial costume. One display was set so a passel of toy cars wove in and out of traffic in a synchronicity that mesmerized. A storyteller was seated in one corner weaving tales of adventure and mystique for those who took time to linger. A woven banner above the door read: Welcome to the 1990 Curriculum County Weavers' Conference.

It was also a curriculum conference for interwoven with the weaving was a series of teaching tools and materials as one might find in a regular classroom—books, workbooks, pencils, lined paper, crayons, and gym shoes—connected with a broad ribbon

of silver threads on which was written: "learning-teaching-learning, learning-teaching-learning" in a continuous loop. A narrator speaking from the monitor to my right intoned:

> **We weave in and out of traffic, weave tales or great stories, weave bits of humor into our speech, ribbons into our hair,..**
>
> **Everybody talks about weaving, uses the word, but only a few know what a loom is. Fewer still have experienced the rhythm, the beat, the movement of weaver and loom as they work in the age-old process known broadly as weaving.**
>
> **There are many kinds of looms, many kinds of weaving, even off-loom weaving. Kids weave twigs together, a weaver bird builds her nest that way. More cloth and more clothing is woven than isn't.**
>
> **Weaving is craft, and surely it is art. Technique is necessarily learned, and art is in the design, the creation. The focus for this conference will be on the weaving process not product, the learning and teaching: the curriculum as weavers and teachers live it and how curriculum can be woven by learners.**

A weaver and teacher, I knew I had come to the right place yet I wondered: How could weaving and curriculum be thought of at the same conference?

I picked up my handwoven name tag and registration package at the desk and began to mingle with the other weavers and teachers. I was wearing my freshly-made handwoven jacket and soon found myself in deep conversation with other weavers who reached out to touch my jacket and talk to me about it.

<u>Early Bird Demonstration: The Navajo Way</u>

As we talked we wandered into an adjoining room and were drawn to watch two very young children weaving on a primitive-looking loom, a jumble of sticks, strings, and threads. On display was a large number of completed rugs enhanced by the bright colors and bold geometric designs I had come to associate with Navajo weaving. A guide talked

to us about her experiences learning the Navajo way, and of the two children's curriculum for learning to weave.

> The Navajo word for "teach" is to "show", and that is exactly what they do. These women, "my grandmother and sisters", showed me, with unfailing patience and persistent good humor, each step in the long process of transforming wool from a sheep's back to the rug with complicated design accepted by the trader. At first I had to learn a dozen things at once, for tapestry weaving is a matter of coordination. My instructors laughed at my awkwardness, sympathized with my injuries, corrected my mistakes, criticized my results. They were never harsh in their criticism but they never allowed an error to pass unnoticed. They always kept me up to the highest standards.
>
> During the period of my apprenticeship I was taught specific things. I mastered a great many details, no one of which may be omitted in the experience of a good weaver. With a few exceptions I learned as a Navajo girl learns to weave. My teaching differed from hers in intensity and concentration, and possibly in materials. Children learning to weave may be given scraps for their materials. I always had the best.
>
> I [will tell] the story of the way Atlnaba and Marie learned to weave. Atlnaba wanted to weave when she was less than four years old. An older sister, Adjiba, allowed her to work a little on the blankets she was weaving and by the time Atlnaba was five she was weaving blankets accepted by the trader. She followed a course quite usual with Navajo children. She began with the last process, that of weaving, and gradually picked up expertness in the preparation of her materials and in making her loom after she had mastered the weaving itself. Her sister had given her good materials and at first she had no need to construct her loom.

By the time Marie, who was three years younger than Atlnaba, wanted to weave, Adjiba had died. Maria Antonia did not want the child to spoil her blanket by experimentation, she was not patient enough to teach her little daughter; furthermore, she wanted Marie to herd and the two activities are incompatible. Marie's desire was so strong, however, that she made her own loom and implements from such materials as she could procure, and bit by bit filched enough yarn from her mother to enable her to set up a tiny loom which she took with her each time she drove the sheep off to graze.

These two children exemplify the two extremes of training girls to weave. Atlnaba with all materials of the best, no loom to construct, and the gentle guidance of her older sister, learned quickly. At five her success was spectacular; it took many more years for her to become expert at the fundamental, but more prosaic, tasks which white men scarcely notice. Marie learned to weave in spite of her environment rather than because of it. She had to make her comb, batten, and loom. Because she could take only a small quantity of her mother's yarn at a time, she had to learn from the very beginning to splice the separate pieces. Her achievement was accomplished to the accompaniment of tears, undaunted perseverance, and wrathful fits of discouragement. When complete, there was for her no glory, no approval, no praise, for she hung her first three blankets on a tree, where they could be seen only by the birds which pulled at their loose strings and by the sheep which shied at their flapping in the wind.

Many women are proud when their little daughters start to weave and encourage them by giving them good yarn and by "showing" them how to go about it. Usually the children make their own looms instead of working on those of their mothers. A small blanket, far better than my first one, brought to a trader, was said to have been made by a child three and one-half years old. She must have had much help, but even so I cannot conceive how her tiny hands had the strength to

> **manage the healds even though they had the coordination. I believe the statement, even though I do not comprehend it, for I once saw Djiba, when she was only two and one-half—she has always been small for her age—fill a bowl six inches in diameter and four deep with water from a coffee pot twice as heavy. Three times she raised the full bowl from the ground to her lips without spilling a drop. Skill like this is possible although it seems incredible.**
>
> **My learning was like Atlnaba's. I had good materials and implements, willing and patient teachers, and I started at the final process so that results were not too far distant. I have learned all the other steps necessary to preparation of the yarn and to the setting up of the loom, but I am far from expert at some of them, in none have I attained the expertness of any one of my teachers. This is not surprising when I consider that Marie spun for nine years before she could pronounce her yarn "real good." (Reichard, 1974, p. 3-5)**

I left this demonstration with a feeling of awe, and more respect for the abilities of children to facilitate their own learning. I began to see the mastery of technique growing out of passion and perseverance. I had begun to ponder the meaning of what it is to teach and what it is to learn.

I turned to listen to the people walking next to me. They, too, seemed to be jarred by the accomplishments of these very young girls, and were questioning the level of difficulty presented to school-age children. Could it be that we, as teachers, underestimate the capabilities of our students, too often spoon-feeding them with fill-in-the-blanks worksheets, and materials prepared for easy assimilation, forgetting the richness of their background and abilities? I began to wonder, as I listened, how curriculum could be more meaningful, how it could become enticement for the exploration of some of the students' strong desires. We stopped for lunch, but the questions about curriculum, motivation, and discipline did not. The Navajo girl, Marie, had shown in her learning to weave under such

difficulties that "desire", "passion", and "perseverance" make our traditional conception of "attention span" obsolete. Making a "plan" and carrying it out now seemed a simplistic way of teaching. As teachers, we began to re-design our curriculum ideas.

Directly, after lunch, I met up with and talked briefly to Gary, the other member of my staff, my working partner. We decided that we would circulate separately and meet after the conference to review our views and prepare the presentation that we were expected to take back to our school.

A quick look at the program showed two tours would take up the afternoon: an historical tour related to curriculum and a research-oriented one on recursion. I let the small crowd move me toward where the tours were beginning. I paused briefly to glance at the photographs of weaving hung along the corridor where we stood. They were interesting but somehow distant in their glossy-ness and precisely mounted frames. I moved quickly past them into the Archive-Library display room.

Tour #1: Curriculum Metaphors

I looked around. The room was set with long tables, a library of information about curriculum, historical and current, and a large centre display of textbooks about curriculum. The guide talked about traditional and current curriculum metaphors. We moved from table to table as she spoke.

> **Currently, the mandated curriculum offered to teachers is divided into subjects and grades with specific lists of skills that need to be "taught" at each grade level. Traditionally, it is a detailed plan made more detailed by the teacher in his/her daily planning and more detailed yet as required by the principal until it is a virtual blueprint of what is to be said, to be done, when, why and how. "It may be assumed that it is the teacher's job to make the curriculum 'work' in the local situation, whatever that might mean" (Smith, 1988, p. 428). It reflects the prevalence of a mechanized or computerized world view (Bateson & Bateson, 1987;**

> **Berman, 1984; Doll, 1988, preliminary draft) with teacher as programmer, student as machine, and curriculum as plan. From ancient times, educators have variously used metaphors that see students as clay, mind as a mechanized clock, preprogrammed mechanism, wax table, steam engine, or telephone switchboard (Kilpatrick, 1985).**

She gestured to the displays. I laughed to myself as I thought of my own experience with teaching and how I had been touched by these metaphors at various times in my teaching career.

> **It is understandable in our technological age that machines and computers have become metaphors for thinking about mind and learning. Our society is inured with economic and business metaphors (Henderson, 1981; Schubert, 1986, for example) that stress efficiency and production and educators seem reluctant to move beyond the production model of curriculum with which they are familiar.**
>
> **The Tyler Rationale is still the best-known and most influential conception of curriculum (McNeil, 1990; Schubert, 1986; Willis, 1975). "Tyler's four central topics for curricular analysis—purposes, learning experiences, organization, and evaluation... have been used by followers of Tyler as recipe-like guidelines for developing curricular policies and practices" (Schubert, 1986, p. 149). "Curriculum design usually focuses... exclusively on some variation of the Tylerian (1949) questions" (p. 188).**

I was reminded of my teacher-training from where we were sent out with precise instructions to plan every lesson according to Tylerian guidelines, and how often the plan was set out on the desk, and then ignored.

Bloom (1984) and Keller (in Keller & Sherman, 1982) whose work on mastery learning led educational thinking in the late '60's and early '70's promotes "efficient" and "organized" teaching touted as "tutoring for every student" (Bloom, 1984; Pratt, 1987), claiming that given time, mastery of any given subject or skill is possible for 95% of children ("A+ Schools," 1984). This is a seductive claim.

Oh, yes, it was seductive indeed. I had read about mastery learning, tried to set it up in my classroom. With a restlessness for change, I wanted to convert my classroom role from puppeteer to participant, to make my classroom ripe for learning as I saw it, and the ideal of mastery learning intrigued me. What came from the effort was more of a composite, a system of teaching that offered the students self-paced instruction. I saw that it worked. Students obviously learned, and many were decidedly enthusiastic. The classroom became a beehive of activity; discipline took care of itself. I never asked the students if they liked working that way or if they thought it a good way to learn. It looked to me that they did.

Dick and Carey (1983) and Alessi and Trollip (1985) systemize mastery learning principles into curriculum development models for computer-assisted learning or computer-based instruction that are essentially feed-back models of Tyler's central topics. Other researchers advocate a diagnostic-prescriptive process, a criterion-referenced approach that systemizes skill levels or specific competencies into learning hierarchies that presume learning takes place in a systematic, linear fashion. "It is anticipated that, in this way, students neither repeat tasks they already have mastered nor work on objectives for which they lack critical prerequisite skills" (Wang, Nojan, Strom, & Walberg, 1984, p. 256).

As well, the psychologist B. F. Skinner influenced the thinking of educators with his behaviorist (stimulus-response) approach to learning. "Noted

> **for his reductionist scientific approach, Skinner is the ultimate believer in a mechanical universe composed of interacting parts" (Briggs & Peat, 1984, p. 264).**

My system of personalized instruction and self-paced learning fit nicely into the guidelines for computer-based instructional packages. I spent several years searching for ways to make behavioralist methods work in a computer environment. I gave up in frustration. The creativity I wanted to inject into the programs simply did not fit within my programming abilities. I left the package preparation to those of more mechanical bent, and return to it now in thought of the value and use of interactive text in computer environments. The work of Papert with his LOGO computer programming sits on the edge of my knowing as an interactive computer environment with possibility for greater than mechanical knowing. A recent newspaper article (Stecklow, 1990) informs that Papert has ventured into the realm of Nintendo video games to learn the powerful appeal of such technology for young minds.

I returned with a start to the speaker and her comments on current curriculum, far different from Papert's view.

> **Current curriculum development and design texts give high priority to "purposes", are developed within Tyler's categories or are more specifically based on Skinner's behavioral objectives (for example, on display were: Dick & Carey, 1983; McNeil, 1990; Ornstein & Hunkins, 1988; Posner & Rudnitsky, 1986; Pratt, 1980). Posner and Rudnitsky and Dick and Carey plan their curricula around behavioral objectives, efficiency, and measured mastery of precisely enumerated skills. The others expand a particular aspect of the Tylerian regime.**
>
> **These educators see curriculum through the metaphor of curriculum-as-plan and look to the product of education, its testing and fixing. Production and efficiency become the texture of learning—"an industrial model that envisions the students as raw material to be transformed by a skilled technician who uses**

rigorously planned specifications, avoids waste, and carefully sees to it that the raw materials are used for the purposes that best fit them" (Kliebard in Schubert, 1986, p. 34). "Creative thought, critical inquiry, reflective thinking all seem unnecessary in a society where the problems are merely technical" (Wood, 1988, p. 31). "What is wanted is a smoothly running operation under the teacher's control" (Beattie, 1988, p. 184). Much time has been taken to develop smooth-looking models intended, it seems, to smooth out any roughness that might be injected by the learners...

At this point, the speaker turned our attention to the smooth finish and technical niceness of the curriculum guides spread out on the tables. I knew from their appearance in my own classrooms that they were filled with ideas and plans that were seductively appealing in their simplicity and common sense.

The speaker reminded us of weaving.

Occasionally, at a weaving exhibition, the items are displayed behind glass to protect them from the "dirty" fingers of would-be "touchers." The glass gives a smooth finish. The weaving looks smooth and glossy, cold and lifeless, untouchable and disappointing. The viewer cannot know the piece intimately and usually passes quickly by.

Weavers joke about their propensity to touch. Weaving, they say, cannot be known unless you touch it. There is something intrinsically satisfying and compassionate in the touch, the feel of the cloth. How the fabric looks does not suffice; to know it you must feel it.

Texture, you see, is a point of view. Could we remove the smooth glass of the exhibit and look more closely, a texture would be revealed, a richness previously unseen. Were we to move closer, perhaps with a magnifying glass, more texture, more could be known. Chances are you think of yarns themselves as

smooth. Well, maybe they are, at some distance, from some point of view. Yet no thread is entirely smooth. How the wool is combed before it is spun, how it is combined with other fibers, how tightly it is spun, how loosely woven, all come together to become its apparent texture. Texture is only apparent to the viewer (feeler, user) according to his/her involvement with the cloth.

Consider texture as a point of distance, a scale that slides from smoothness to the depths of roughness according to the perspectives of the viewer. Smoothness is illusionary, the texture remains, unto infinity. It is never finished, only smoothed to satisfaction in its particular time and place. Roughness is revealed through closer inspection and through use.

So, too, a curriculum has texture (richness, value) according to the involvement of the users. What intrigues are there to draw the user into the depths of its use, to know intimately its richness?

I was reminded of the smoothness of the weaving photos in the hall that I had given only cursory interest. The texture of the weaving they pictured was not available to me in the context of the pictures' glossyness. I was not able to touch, or become involved with them. They held little appeal (or cuddle)!

I thought of my learning to weave. As I experienced my weaving curriculum, I lived it and I became a weaver. I thought of elementary classrooms. Curriculum seems sterile or even antiseptic in these efficient and smooth-running classrooms, where text has become textbook, workbook, ditto sheets, and instructional packages (Schubert, 1986) and where the intent is to deliver knowledge to the learners and curriculum is a matter for prespecification. "Knowledge is sliced up into departments, lessons, and what can fit on machine-scored multiple-choice texts [sic]" (Ornstein & Ehrlich, 1989, p. 199), something test-able, defined in its end by regurgitation. When the context is simply the content delivered the cloth that is woven may be sparse indeed. When we look to mastery of the

seemingly disjointed parts, students have difficulty putting them together in any coherent manner (Sawada & Young, 1989). The cloth becomes difficult to weave.

The speaker continued and posed the question that was to lead the thinking for this conference:

> **"We will not force children to learn... by merely filling the curriculum with more requirements" (Elasky & Wood, 1988, p. 28). Teachers need to be actively weaving the curriculum with the students (Atwell, 1987; Doll, 1986; Goodlad, 1984; Katz & Chard, 1989; Kreisberg, 1988; Rogers, Roberts, & Weinland, 1988; Snyder, 1988; Wigginton, 1986), "immersed in the complexity... to liberate their visions" (Briggs & Peat, 1989, p. 179). What kind of curriculum could be woven that would become the life of learning for the student, where text and context are woven together, as weaving has woven the lives of so many weavers? Aoki (1990) sets this question:**
>
> > **For it to come alive in the classroom, the curriculum itself has to contain, said or unsaid, an invitation to teachers and students to enter into it. Not only that, there needs to be a reciprocal invitation. The curriculum-as-plan must wait at the classroom door for an invitation from teachers and students. And when the curriculum, teachers and students click, we are likely to find a live tension that will allow the teacher and the students to say, "We live curriculum."... To curriculum developers, the question is a challenging one. "How can a curriculum be so built that it will touch something deep that stirs teachers and students to animated living?" "How can a curriculum-as-plan be so built that it has the potential for a curriculum-as-lived that is charged with life?" "How can a curriculum be built so invitingly that teachers and students extend a welcoming hand?" (p. 40-41)**

We were invited to re-think traditional concepts of curriculum through the metaphor of weaving as curriculum, and to re-conceptualize curriculum through new, more specific

weaving metaphors. From this process, perhaps we can weave a tapestry of how a curriculum-as-plan could become curriculum-as-lived. This conference is an attempt to lift curriculum off the page and into the lives of the learners.

I sat for a few moments to ponder the question of curriculum-as-lived in relation to my learning to weave, and in relation to the whole of life itself. Life and living, curriculum-as-lived, what could that mean for curriculum writers and users? How could we "live curriculum"?

I joined a group for coffee that seemed to be intent on their conversation. One colleague was joking about the paradoxical elements in the questions just raised. Curriculum as we knew it was a set-out piece of paper. How could it live? The philosophical paradoxes, the self-referential nature of the question took us into jokes about the "new science" rabbit-duck and liar paradoxes (Briggs & Peat, 1984, 1989; Lawson, 1985), perceptual changes (Burke, 1985; Davies, 1983), and "post-modern" language games of Wittgenstein (Papano, 1988) and Lyotard (1979). It depends on how you look at it—and I sensed we were getting far beyond the scope of this conference!

We came back to more familiar territory (to me) when the philosophies of John Dewey and his vast exploration of "experience" and the "art" of experience (Alexander, 1987; Dewey, 1916, 1938; McNeil, 1990; Schubert, 1986; Tanner, 1988) were being re-visited along with the works of Alfred North Whitehead (1929), Piaget (Boden, 1979; Case, 1973; Doll, 1983, 1988), and in some more modern studies of schooling such as *The Paideia Proposal* (Adler, 1982) and *A Place Called School* (Goodlad, 1984).

I was becoming intrigued with these philosophical meanderings and the coffee break, gone quickly, left me with the resolve to explore further into these "old" and "new" theorists' works.

As we headed into the next session, there was more than one joke about the glossyness, the glass-y texture of the polished program we held in our hands.

Tour #2: Weaving Through Recursion

Still drowning in the thought-trains of new science and post-modern philosophies, I wandered toward where the next tour was beginning. There was a labyrinth of displays that spiralled together and became a confusion of visual images, one set nested within another. It was beautiful in its complexity and interconnections, a series of changing, interacting structures joined somehow to create an image of wholeness.

As I wandered through the maze of tables and displays, I became aware of huge prints hung along the walls that drew me right into their intrigue. I was to learn something about their meaning as I listened to this speaker talk enthusiastically about life and living, with repetition and change. I was drawn in, finally, because I had always thought of repetition as boring and non-useful, in terms of production and producing rather than in any way creative. Here was a new way of looking at repetition with an eye for meaningful change.

The speaker had already begun by the time I tuned in. He was relating the curriculum discussion of the last tour with a way of seeing life that, he said, could be thought of as a "bringing forthist paradigm", a way of looking at learning as a natural movement within life. Learning is brought forth from within by the natural processes of experiencing situations and happenings that constitute living. What we learn in one moment becomes ground for what we learn in the next. The ground becomes foreground, or background, part of the context, the texture, the richness of life. The text of our living is simply the doing, the living and experiencing, the learning we do.

Recursion shows that texts, tests, plans, and fixing are not all there are. Understanding and interaction, curriculum-as-lived, recursive cycles of learning create a new view of curriculum: curriculum in a new weave.

Recursion embodies change or learning. As an experience is repeated, a change in us happens. It might be triggered by what Bateson (1979) calls "a

> **difference that makes a difference," a spark or perturbation. It might work simply through a system of self-referencing cycles as shown in the models of Bateson (discussed in Bateson & Bateson, 1987; Berman, 1984), Lovelock (1987, 1988), and Prigogine and Stengers (1984) where experience and reflection on experience become part of the recursive learning cycle (Fischer, 1987). It might be found in confusion, becoming "order out of chaos" (Gleick, 1987) or meaningful change emerging from "far-from-equilibrium" states (Berman, 1984; Prigogine & Stengers, 1984; Sawada & Caley, 1985).**

I thought of my own learning and the ideas seemed to fit. My first warping experiences were traumatic in their confusion, as I struggled to remember exactly how I was shown. Each teacher had shown something different, their own way of doing. It took many years of warping, re-warping, experiencing the process anew each time. I went around the circle of weaving classes, asking questions and reading. I kept warping and learning until I was able to make a connection that cleared the confusion, that jumped my understanding to a new level of coherence. From this new plateau I could see the warping process in new light. I could build a system of warping that was truly mine, that worked best for me, a composite of all I had learned.

The speaker continued:

> **Recursion, quite simply, may be seen in the doing, a spiral of repetition (circularity) creating suspense and change (transformation) (Vitale, in press), a process found often throughout our lives. Once we start to recognize it, we see recursion in life.**
>
> **Viewing life as a system of recursive processes (Augros & Stanciu, 1987; Bateson, 1979; Briggs & Peat, 1984, 1989; Capra, 1975; Carse, 1986; Maturana & Varela, 1987; Prigogine & Stengers, 1984; Zeleny, 1985) points to recursion as a flexible structure of interacting wholes and parts that change themselves as they**

> **change each other and can only be known "within [the] evolving whole: the whole and the parts mutually determine each other and are related in a circular dependency" (Zeleny, 1985, p. 120).**
>
> **Bateson addresses this as the unity of mind and nature (1979), intellect and emotion (Bateson & Bateson, 1987): two sides of the same coin, the system of parts with individual identity contributing dynamically to the whole. Maturana & Varela (1987) point out the importance of environment changing and being changed by the interactions of an organism with and in it. The graphic works of M. C. Escher (1986) are visual portrayals of these dynamics of change.**

Here we were directed to the prints lining the walls and I began to understand my initial intrigue with them. The viewer's perspective furnished the movement—I saw them differently as I moved closer, took another look, so to speak. The works evoked circularity and change where, for example, birds unexpectedly came from the sea and fish emerged from the sky, continuously, as we changed our perspective, as order emerged. Others showed circularity in the drawing hands drawing themselves, and in the warped views of ourselves seeing ourselves. The wholeness inherent in each of the drawings emerged in the movement of the viewer's perspective as each part was viewed as itself, then as part of the whole.

The speaker continued:

> **Yet recursion, as learning, is not something that you can be told (lectured on). It is something you must experience at some deep and rich level, as we can all remember clearly those experiences that touched us deeply, with meaning. When messages given touch our experience, we experience the message, and it becomes part of us, something we use. As the message is lived, it is then part of our living, the medium becomes our new message, the message our medium. As we learn, our learning becomes part of us, is contained in subsequent experiences. The whole is**

contained in itself, within its levels, within recursion (von Foerster, 1981). Carse (1986), Fischer (1987), Nollman (1990) and Sahtouris (1989) suggest we are able to constantly make medium become message through indefinite recursion. We have choice.

I thought of weaving as content and context, as medium and message in my own life. Knowing about weaving changed my life; it was sparked by the perturbation of a loom-thing in my friend's living room, a curiosity leading to questions and doing—a context of learning neither linear nor hierarchical. It was an immersion in doing that became more than the product, each product becoming part of doing the next. Weaving was medium, became message, and my reason for doing. Message became medium, an unending circularity of doing, building, knowing. Knowing weaving changed my life more profoundly than I knew. I remembered reading about Seymour Papert (1980) whose life was changed by his intrigue with differential gears, that when applied to high-school mathematics provided experiential understanding, and that became, later, his commitment to providing a similar (recursive) means of understanding the world through LOGO and computers. Recursion, whether identified or not, is part of our lives!

I returned my attention to what the speaker was saying:

Capra (1975, 1982, 1988) began within his field of physics and explored the interconnections and interdependencies between Eastern philosophy and our post-modern sciences, finding the similarities, the wholeness, and a new order of understanding for each of the parts. His "intuitive awareness of the oneness of all life, the interdependence of its multiple manifestations and its cycles of change and transformation" (Capra, 1988, p. 230) needs to become message and medium, a new way of seeing for education (Aoki, 1990; Briggs & Peat, 1984, 1989; Doll, 1986, 1988, preliminary draft; Sawada & Caley, 1985), for education in a new weave.

This last statement left a new theoretic question to be contemplated within the boundary of curriculum-as-lived. I needed to think. So, since the agenda showed a short break before dinner, I scurried back to my room to write in my journal of the wonders I had met so far in this conference.

The new use of "texture" intrigued me. Texture, text, context—I wondered how they were related. I looked them up! I was astonished. They were all weaving words!

"*Text*," was it textbook, or something else? It is derived from "texere" meaning "to weave". How could a text be woven?

"*Context*" means "surrounding", is derived from "contextus" meaning "connection", which is from "contexere" meaning "together to weave"—connections woven together! Would context become richer, deeper as more connections are made, repeated? Could context become recursive? How does context include the love of doing, the community, the fibres, the texture?

The weaving word,""*texture*" means "a web of threads", is derived from "textus" meaning "fabric". Thinking of text as a woven web, context as the recursive connections, sees them brought together through texture into a richly woven fabric.

Yet, texture, just seen, is also a way of looking at things. It is depth below the surface, the deeper meanings individuals attach to action (Wood, 1988). It is scaled, a series of deep, deeper, and deeper that points to the roughness that a viewer contemplates below the smoothness and polish of surface. Smoothness, too, is a part of the way of seeing. Gleick (1987) describes the continuum of diagramming a coastline first as measured in miles, then in inches, and in increasingly smaller units. The results measured in miles yields a smooth-looking coastline, as drawn. The one done in inches is definitely more textured, rougher, having a more ragged appearance, a longer numerical measurement label, and contains more information. The smaller the scale, the rougher the diagram and

the larger the measurement number, even to infinity. This is texture, from surface (cursory) smoothness to increasingly complex or deep roughness, richness unto infinity.

Everyone talks about weaving as if they know it but relatively few truly *experience* weaving, get into its depths. Everyone talks about the curriculum, talks about using it, talks about what its teaching does, but how can we truly experience it, go deeply into its texture?

Texture, too, arises from, is embedded in the cloth of a weaver, and involvement with the product. Many weavers are drawn to earth-tones, nature, plants, sheep, natural fibers (wool, silk, cotton) and so synthetics and metallic threads are immediately noticed for more than their flash and color, for their un-conventionality. Some weavers are drawn to smooth and tiny threads woven in intricate patterns, others favor thick-and-thin and rough-looking yarns woven in a simple design. Others choose fat and bulky yarns that weave quickly and produce a soft and homey fabric. Still others are drawn to the difficult fibres, the linens and silks. All of these choices reflect a world view, an attitude that comes from the roots of the weaver. Each aspect chosen reflects something, tells us what that weaver is experiencing as s/he weaves.

Consider too, the project choices (placemats or wallhangings, tapestries or transparencies, coats or bookmarks), the size choices (scarves that weave up quickly or 3-dimensional statements that take months to execute, intricate miniatures or voluminous bedspreads), the color choices (soft and gentle browns, subdued and easy grays, loud and brassy reds, bold and brilliant yellows, strong and powerful blues, vibrant greens), the production choices (mass-produced table runners or one-of-a-kind accented capes, meticulously done handbags or thrown-together shawls) and so on. Each weaver builds an image through their work. Each piece they do, based on their choices, adds to the cumulative impact of the choices. As the community of weavers and buyers gets to know a weaver's work they begin to expect certain products, ones that are compatible with what has come to be known as their type of work, what they can be expected to produce. A

pattern of the weaver's choices becomes evident, though the weaver may not be aware of it. Interestingly, the growth of a weaver shows, too, in her/his weavings as the audience knows them over time. Texture of the weaver becomes apparent in his/her world.

Smoothness is illusionary, the texture remains unto infinity. It is never finished, only smoothed to satisfaction in its particular time and place. The roughness is revealed through closer inspection and through use. Each piece of work is polished, smoothed for the "public" view, all ends tucked in or clipped off, the cloth washed and neatly pressed or steamed and hung—an expression of the total involvement of the weaver. Smoothness and texture are reflections of the weaver's choices and the viewer's perspective. Texture encompasses the weaving; it *is* the weaving.

Texture is wonderfully rich, a weaving word. It garners depth of seeing and feeling through roughness of yarns and product. How could a curriculum have depth and richness, a roughness unfinished, beyond smoothness, a possibility for recursion? How could curriculum live?

I had begun to touch, feel, become involved with the notion of curriculum-as-lived in a way that I had once been immersed in weaving. Here was an added dimension, a richer texture for viewing curriculum through recursion, a new way to look at repetition, change and learning—richer, deeper, but setting my thoughts in a whirl!

Still milling and swirling in the river of my mind, I pulled out of the depths and gathered myself together, my head full of questions, to slip into the Banquet Room and enjoy my dinner. I listened to the conversations around me and was occasionally drawn into participating. Others were drawn to the ideas and the depths of text and context as I had been. We mulled over the ideas of what texture could mean to curriculum-as-lived. Not surprising at a weaving conference, the visual contexts of Escher's work garnered much comment. The discussion led into recurring themes of Escher's work: "Strange

Loops [that occur] whenever... we unexpectedly find ourselves right back where we started" (Hofstader, 1980, p. 10) and implicitly, loops of infinity, paradox, illusion and double-meaning, and of reality-fantasy. A Hofstader fan remembered out loud that "Strange Loops involving rules that change themselves, directly or indirectly, are at the core of intelligence" (p. 27) and I thought of curriculum-as-lived changing itself and becoming curriculum as it is lived. I thought, too, of how recursive this all appeared though recursion was more than a re-occurring loop, for each coming back would be a new level, one higher, or richer, built on and within the context of the one before. I wanted to go back to the drawings in the hallway but for now, lacking time, my perceptions must suffice.

The speaker who rose to talk after dinner simply gave more information for our boggled minds. In a certain way, the ideas of texture began to make sense as he talked about metaphor in depths that themselves were new to my thinking.

Guest Speaker: Weaving with Metaphor

The speaker suggested that his topic would offer more texture, another perspective for curriculum-as-lived, a way to integrate weaving and curriculum with a recursive outlook for life. I listened, relaxed, as he waded through the history of metaphor and suggested its usefulness for our endeavor.

> **We live with metaphor. We filter the texture of our world through the metaphors we have developed for ourselves. "In all aspects of life... we define our reality in terms of metaphor. We draw inferences, set goals, make commitments, and execute plans, all on the basis of how we structure our experience, consciously and unconsciously, by means of metaphor" (Lakoff & Johnson, 1981, p. 322). "It is as though the ability to comprehend experience through metaphor were a sense, like seeing or touching or hearing, with metaphors providing the only ways to perceive and experience much of the world. Metaphor is as much a part of our**

functioning as our sense of touch, and as precious" (1980, p. 239). "Everything's a metaphor when we think about it" (Bach, 1988, p. 269). Metaphor is most often implicit, unnoticed as part of our lives though we learn metaphor as early as we learn language. "As individuals we gain our command of metaphor just as we learn whatever else makes us distinctively human" (Richards, 1981, p. 51). "Metaphor is at the bottom of being alive" (Bateson quoted in Capra, 1988, p. 77).

This spoke out to me as a remarkable resemblance to recursion—at the bottom of being alive. But then, could it not be that metaphor itself is a recursive process of knowing? When a metaphor becomes part of one's knowing, it is ground for the process we had just called recursion! This seemed so true but I couldn't quite say why.

The "many faces of metaphor" (Salner, 1986) have long been hidden behind the smoothness of "rhetoric" or the curlicues of "embellishment". Though Aristotle, no lesser man, said in *The Poetics* (1459), "The greatest thing by far is to be master of metaphor;" and in *Rhetoric* (1410), "ordinary words convey only what we know already; it is from metaphor that we can best get hold of something fresh." "His praise of metaphor's ability to induce insight was never carried over into modern philosophical thought" (Lakoff & Johnson, 1980, p. 190).

In the 1930's, I. A. Richards brought new texture and life to metaphor by asserting its role as "creator" and "carrier of meaning". He noted the transaction between contexts and saw metaphor woven on an essential tension between disparate elements that come together to establish a new concept, creating new information (Richards, 1981). A new view of metaphor began to emerge: the word "metaphor" as a metaphor for itself as creator, as bringer forth of something new (Lakoff & Johnson, 1980; Salner, 1988).

> **Richards' work fuelled a growing interest in metaphor, leading proponents from continued work within traditional language (Black, 1981; Lakoff & Johnson, 1980, 1981; Ricoeur, 1975, 1981a, 1981b, 1984) to other disciplines including philosophy, psychology, and other cognitive sciences (Johnson, 1987; Ortony, 1979; Smith, 1981). The role of metaphor has expanded from "deviant linguistic expression" (Johnson, 1987) to "creative tool" (Paivio, 1979), a "lens for seeing" (Black, 1981), a "way of seeing the world" (Ortony, 1979), a "way of expressing" (Ortony, 1979), a "tool for communicating" (Bohm & Peat, 1987; MacBeath, 1988; Reid, 1988), and more specifically, "a pervasive, irreducible, imaginative structure of human understanding that influences the nature of meaning and constrains our rational inferences" (Johnson, 1987, p. xii), a tool for "trying to comprehend partially what cannot be comprehended totally: our feelings, aesthetic experiences, moral practices, and spiritual awareness" (Lakoff & Johnson, 1980, p. 193) and a way to define our reality. "We draw inferences, set goals, make commitments, and execute plans, all on the basis of how we in part structure our experience, consciously and unconsciously, by means of metaphor" (p. 158).**

This startled my conventional view of metaphor as a creative way to talk. Metaphor reached out for new depth as I began to think of it as a way to comprehend my life, a way of seeing beyond what I can explicate into what can be known at other levels of knowing. Very elusive, indeed!

> **There are many roles for metaphor. It can act as a modality of thought; synthesize, analyze, or concretize abstract ideas; illuminate connection; test belief systems; constitute theory. It can be expressive, affective, evocative, explanatory, or communicative (Gruber & Davis, 1988). It can inform and enlighten (Ricoeur, 1981a), make meaning emerge (Ricoeur in Reagan & Stewart, 1978), even redefine**

> reality (Lakoff & Johnson, 1980, 1981; MacBeath, 1988; Ricoeur, 1984). "'Seeing-as,' which sums up the power of metaphor, could be the revealer of a 'being-as' on the deepest ontological level" (Ricoeur, 1984, p. xi).

"Seeing-as" as "being-as" struck me as a powerful way to think of knowing. Metaphor could connect us to the deep textures of our lives were we to allow the seeing-as to reach into the depths and pull out meaning!

> The seeing-as of metaphor has been explored by others: Schon (1979) in social contexts (urban planning), Carbonell, (1982), Petrie (1979), Sticht (1979), Sawada (1986), and Sawada and Caley (1985), for example, in educational contexts, "as bridges between the known and the unknown" (Ortony, 1979, p. 16). Boyd (1979) suggests it "play[s] a role in development and articulation of theories in relatively mature sciences" (p. 357) and is sometimes essential to the development of scientific theories. Kuhn (1979) extends this to the use of models in general, at the heart of theory change and transmission. While Boyd and Kuhn see it as functioning to introduce or revise existing terminology, Bohm and Peat (1987) take metaphor to be a truly creative way to "see" in new ways and to develop communication between interdisciplinary and interpersonal difference. Schon (1979) uses "generative" metaphor as a special case of "seeing-as" to focus on "problem-setting" rather than "problem solving". In this sense a problem has "more to do with ways in which we frame the purposes to be achieved than with the selection of optimal means for achieving them" (p. 255). Metaphor becomes a working member of problem-solving in social, science, and other world problems.

When metaphor is a truly creative way of seeing and communicating, it is a bridge between the known and unknown. With these thoughts, I began to fashion an image of

how my love of weaving could become a bridge to curriculum, becoming a love of learning for students drawn into the depths of curriculum-as-lived.

Again I needed a space to think. I wanted to explore the connections between recursion and metaphor, metaphor and curriculum, and recursion and curriculum. Metaphor in context of recursion could give metaphor new meaning, a new usefulness. Thinking about curriculum as weaving was an entirely new way to see curriculum. First, I had to look at how my own weaving curriculum was recursive, then how curriculum-as-plan could become recursive. The questions were becoming more refined and more intense. The tension was building.

Very quickly, though, the tables were cleared and we moved into a short business meeting which was intended to look at metaphor as methodology, our way of proceeding.

Business Meeting: Metaphor as Method

Setting my questions aside for the moment, I focused on the coordinator's outline of the agenda for this evening and the next two days. We were reminded that we were trying to generate and ponder questions, not answers. Which led me to more questions!

The chairperson introduced the business of this conference as reaching out for "a curriculum in a new weave" through recursion and the metaphor of weaving and suggested that we proceed with our immersion in weaving, then move on to curriculum and possible weaving metaphors for curriculum. He started with some good points about the usefulness of metaphor for our purpose.

> **While a metaphor is "working" it is alive and creative. When it becomes familiar, it becomes implicit, taken-for-granted, habit-tarnished, dead. "Contextual action creates a new meaning which is indeed an event... but if it is adopted by an influential part of the... community, it may become an everyday meaning... [and] the metaphor is no longer living but dead" (Ricoeur, 1981a, p. 170). Curriculum based on mechanical and computer metaphors has become dead. Metaphors which,**

"when fresh, initially prove[d] illuminating, are becoming ossified in textbooks and courses as actual alternative modes of procedure" (Barrow, 1984, p. 153). Curriculum metaphors need to be reviewed and seen anew. Seeing curriculum as weaving, weaving as curriculum may foster action toward a new set of curriculum metaphors.

Method could be considered a way of proceeding, a way of standing, seeing, and speaking. Metaphors are being continually created, are continually creating our lives, yet relatively few thinkers from the arts and sciences have attempted to describe metaphorical approaches to knowledge. There is no bedrock of methodological procedures that identifies the metaphorical approach and differentiates it clearly from other ways of knowing (Reid, 1988). Considering what metaphor is: a live connection (tension) between two seemingly disparate concepts simultaneously conceived that provides awareness of one through the other, it would seem that a methodology of metaphor would provide elaboration of the grounds or contexts of the two concepts and exploration of the extent to which they can be related. Starting with thinking of one in terms of the other, allowing the tension to be creative, and conjuring associations, feelings, and thoughts through the awareness of both conceptual frames would "pull us away from narrow, linear thinking, and leave us with a sense of curiosity" (Reid, 1988, p. 25). Curiosity begins creative reconceptualization. Unfolding the metaphor, remaining perceptually sensitive to similarities, differences, implications, and extensions (Bohm & Peat, 1987) would become cloth for the looms of curriculum change.

We were invited to express our concerns about the process. We talked about the possibilities. I pointed out that Bohm and Peat's (1987) and Briggs and Peat's (1989) steps of scientific discovery could guide our own discoveries at this conference. First, a

"sense of inner significance of a poetic equating of very different things,... a kind of tension or vibration in the mind, a high state of energy in which a creative perception of the meaning of the metaphor takes place nonverbally,... [emerges] to unfold the inner meaning of the metaphor [through] exploring the subtle similarities and differences between A and B" (Bohm & Peat, 1987, p. 33). "The tension between the obvious differences and the discovered similarities forces the reader's mind out of its categorical filing system into subtleties and nuance" (1989, p. 196), a pattern of scientific discovery suggested as "initial frustration, confusion, and mental chaos followed by unexpected insight" (p. 192). Being a weaver of complex pattern, I could identify with this "method" of seeing metaphor, "working" the pattern between weaving and curriculum.

Others reminded us that Schon (1979) and Smith (1981) both suggest that the intimate knowing of one subject creates ground for or frames the exploration of another. And within the subtle workings of metaphor one researcher (Reid,1988) reminded us that we needed to "learn and cultivate twilight vision", notice the nuances, peripherals, and impressions. She went on to talk about "conjur[ing] up associations, feelings, and new thoughts" (p. 25), becoming "aware of an association of events more complex than she previously knew about" (p. 25).

Clearly, we could do no more than start with one subject, weaving, and gradually shift our awareness to the other, curriculum. The process would take care of itself as we allowed our perceptive energy to become intersubjective, circling from implicit to explicit, ground into foreground, becoming background, implicit, then explicit again.

It was agreed, then, that to create this exploration (and the work of the next two days of this conference), we could draw on these hints and the more specific steps prepared in a handout by the conference committee that were based on MacBeath's (1988) adaptation of Peter Checkland's interactive systems approach (see Appendix A).

We noted, too, that we could each only experience the process and emerge with our personal knowing. Each conference participant takes, in one sense, a solitary journey so

blind spots may not be apparent, and though some may be uncovered, others will inevitably be created in the process, as is done by the very nature of creating a metaphor itself. For, in the making of a metaphor certain features are highlighted while others are suppressed. The Conference Reports will be individual records of each journey/truth. No generalizable conclusions can be expected but the reports may become an option for on-going conversation between curricularists and the teachers and learners that use curriculum. "Validity in the human sciences is not a question of right or wrong, but of the disclosive power that is brought to bear" (Aanstoos, 1986, p. 3). It is not a plan that will be finished; it does not end as recursion does not end. It will produce no definitive answers though it may spark a few questions. It is one level on the scale of roughness. It will be rough, have texture, and we all hoped, interest and richness though we recognized it is still part of an unwoven universe. Applying the metaphor of weaving to curriculum may not generate any shocking, new insights though, it was hoped, it may spark some perturbations.

To prepare and perturb the process, this evening's plan was to begin developing curriculum in a new weave through metaphor by following these steps. First, and for the rest of this evening, I would articulate the metaphors of weaving and teaching weaving from my perspective. This would take the form of an exhibition that would be left on display throughout the following days of the conference.

Next day, exploration of the weaving component would continue with guest weavers, commercial exhibits, and two weaving plays. The purpose would be to generate a shared perspective of the weaving metaphor so all participants would have a fuller understanding of the weaving component of the metaphor. That would be our way of gaining (or reviewing) an intimate knowledge of weaving.

The third day would re-introduce the curriculum aspect with classroom examples through mini-workshop sessions and student presentations. In the process we could begin drawing the metaphor together through the perspective of weaving as curriculum,

curriculum as weaving and the metaphors within these (texture, pattern, warp, weft, cloth, thread, yarn, for example).

"Curriculum... is a moving form; conceived as an aspiration, the object and hope of our intentionality, it comes to form and slips, at the moment of its actualization, into the ground of our action. It becomes part of our situation" (Grumet, 1988, p. 455). Seeing one connection leads to seeing another. "Reflection upon our 'seeing' changes the very seeing itself" (Werner, 1984, p. 32). The movement between curriculum and weaving metaphors will circle, continue, creating a tension, working, re-working, building, creating, until some particular metaphors leap to the foreground as more apt than the rest. This will be the recursive workings of metaphor within metaphor, ground into foreground (and background), weaving metaphors into curriculum metaphors, until it is done (reaches one plateau).

These stages are circular and continuous, with any changes or insights gained at any level affecting, being integrated into, and becoming ground for the continued process. "The plan is never the experience" (Werner, 1988, p. 96). What we learn from this conference, its rich background of weaving and curriculum and its small group interactions, may be vital to our understanding of what curriculum can and should be, a promising beginning for new answers and more questions. New weavings may emerge to become new views of curriculum, new ways of living curriculum that may reshape the epistemology of schooling.

We will close the conference on the third day by coming together one last time informally over coffee to re-work any concerns, ask questions of each other, and to review the time we have spent together. We will leave, then, to go our separate ways for a while, to contemplate, and to prepare our Conference Reports—how we will communicate this learning and background to our home schools. Our challenge will be that the expression of "tacit knowledge" (Polanyi, 1966), "electricity of nuance" (Bohm & Peat, 1987), trans-experiential insights, and conceptual textures, though ultimately fruitful, may be impossible

to express directly. From the fabric of weaving, from the texture of curriculum and weaving, through metaphor and recursion, our reports will show how our views of curriculum changed as we experienced the conference—and the wonder of intersubjective research could become the wonder of interpersonal communication! The conference itself will be text and context, medium and message, shown in its texture as it is lived. Yet, this is a conference that will not be finished for there is no conclusive, definitive answer to the question, "What kind of curriculum would bring forth recursion in an educational community?"

Looms Display: Weaving Curriculum — Karen

I slipped quietly into the loom display room and watched as my colleagues milled around and between the displays. The room was set to show my curriculum for learning to weave and to teach weaving. The looms were placed in a roughly linear progression from the aisle at the entrance, through the time of my initial intrigue to recent abandonment, in a spiral/circular pattern that ended where it began. At each table, bits of information were displayed to draw the viewer into the texture/context of my weavings and into knowing my weaving curriculum. It was important for me to indicate my love for weaving—not just the physical weaving, but the whole of weaving. I loved the luxuries of wool, depths of soft cotton, the people I meet, the weavings I did...

It didn't start that way. Simple intrigue became curiosity, then passion. I had never seen handweaving, nor knew it existed. There were no memories for me of mothers or grandmothers weaving in my childhood. Yet as I explored the world of weaving I came to love it. The people drew me; the weaving drew me. The books and magazines, the possibility, the yarns, and the values expressed resonated somewhere deep within me, creating an urge to know, a wonder that something could be so. As I learned, I wanted to share my passion. From there, weaving wove my life.

My curriculum and growth as weaver had many bulges in its outside boundary. I was often pushed/led into unknown territory, bulged out to one side and then another. I went back to "the beginnings of weaving", into "primitive" weaving, a world previously ignored. I had to learn how it worked, do a bit myself, understand the ways in which all weaving is the same. I needed to build looms of various sorts; I needed to consider how I was going to show the completely uneducated (in weaving) students what weaving was, what a weaver could do, and how a weaver becomes. I needed to draw them into learning to weave by weaving while spending very little money on equipment. It was a challenge, humbly reminding me how I had challenged myself early on in my learning.

And, wow, did I gain/learn from the experience! The message I gave through my love of weaving became the medium that pulled me to learn more—from my students, and my explorations, drawn into areas previously ignored, pooh-poohed. I had thought of myself as a Sophisticated Loom Weaver, doing Complicated Designs. It was hard for me to learn primitive weaving, hard to admit its value, but I am glad I did.

By going into their world I was wonderfully enriched, even somehow fulfilled, through their rich reactions and continuing explorations of the beginnings I sculpted from sharing my experiences and expanding my knowledge—as I shared Weaving which had become my Life (Me), reaching into the realm of my maturing/maturity as Weaver.

I could see puzzled expressions sometimes and moved over to speak to those who seemed to have questions. For the most part I let the looms, the weavings, and the short remarks fastened to them speak for themselves.

Initial Interest. The loom-thing intrigued me. It stood stately in the middle of my friend's living room. Curiosity drew me. I had never heard of weaving but the loom and the weaving drew me into wanting to know.

The loom drew me to touch it intimately, a smoothness of beautiful wood, a complex of levers and pedals and wires. The weavings interested me in knowing how they were made but it was the loom that remained large in my mind.

Expanding my Interest. I badgered my friend with questions. She took me to the local guild meeting where I discovered more weavers—and books, and magazines, and... I ordered a loom from Santa who obliged with a wonderful floor loom like my friend's, only smaller. The new maple shone. It folded, was invitingly sensual. I just looked at it, touched it in awe. There was no room in my house for it, no time in my life. It sat in the living room, folded up, put away, yet it drew me, said, "learn me".

Off I went to the yarn store and trudged to my friend's house with two colors of yarn and absolutely no idea of what to do with them. I thought one lesson would do.

We warped up her loom and I wove off the piece that turned out hard as a board. Then I tried it myself. After three days of fiddling I tore off the threads, jammed them into a ball-shape and draped them on a nail on the living room wall: a conversation piece of my first warping attempt, a tangle of brown cotton. I went back for more lessons.

Her advice, I remember, was, "Enjoy every part." I didn't know then that some parts were so tedious there was good reason for her advice. I soon discovered the "part" that I needed to learn was called "warping," what I thought I would "learn" in one time but really took several years, many teachers, and much effort and practice from me. Making the warp forms the structure, the set of threads conceived and executed according to plan, smoothly measured and wrapped onto the loom, ready for weaving into cloth. It is a complex procedure, one most weavers dread. The advice to enjoy, I remembered quite often, and truly I

struggled, persisted until I could warp any loom very quickly and smoothly, and usually enjoyed. Mastering this process, making it work well for me and my students was one of the curriculum tasks I set for myself. In learning to warp, I learned about loom parts and how the loom worked—and new meaning for the maxim: "You've got to be warped to weave!"

Feeling Confused. In restless pursuit I continued to search for a teacher to tell me the "right" way to do it. They all told me different; I learned some from each one, and my confusion lasted for many years. I wanted to know. I struggled to learn the "best" way, a way that worked well. I tried ways I read about, wrote letters, kept asking and asking: How do you do it? What's good about your way? From this pot-pourri I put together My Way, the way that I teach though I remind my students that other ways are as good, maybe better, depending on what suits each weaver's skill and intent. Recently, indeed, I have heard of a "new" way that is done by a weaver who weaves in his "old" way. Even now I might need to learn that one, too!

I wanted to know how pattern was made. Most weavers don't think of pattern like I did, for patterns in weaving are not written, but done. Patterns are shared. There are some books and magazines filled with pictures and pattern descriptions, used more to inspire than to prescribe—not that prescriptions aren't there, but that most weavers don't use them. Weaving is done thread by thread, decision by decision. Its ways are not easily set down on paper or in stone. And I was compelled to find out how it worked.

I talked out occasionally, in a thoughtful tone:

Decisions need to be made from the conception that a weaving will be done. What threads will be used—in what size, color, length, texture, what combination, what quality? What spacing of threads? How heavy the cloth? What is its intended use?

Then it must be decided what pattern to use. Is the product best suited to plain weave or complexity? What intrigues the weaver? One of the first warps I put on my loom was for a poncho, a complex pattern of diamonds set inside each other. I threaded it on; it took a long time. It was a distinct challenge, not a usual beginner's pattern. When I had it warped, I decided quite arbitrarily that I did not want to weave it. It seemed just too tedious to weave one whole yard of the same pattern. Had I known then, I could easily have varied the weft colors (those woven in) and avoided boredom. Had I known then, in later years I would weave twenty or thirty yards at a time! What I enjoyed in them, then, was the rhythm of weaving. I had become more skilled in the process and so I enjoyed it as a challenge of a quite different sort. How my perception (perspective) changed as my learning grew! How repetition took on new scope!

There is more to a weaving than its explicit pattern. Experiencing weaving includes attention to rhythm, style, technique and the flow of experience, producing, through warping and weaving. A piece of weaving is formed from the immediately available influences: available materials, accessible equipment, the latest magazine, the vision of the artist, the social influence of the community of weavers, the conversations with friends and family, the utility of the article woven, its need for practicability, and so on. The weaver draws from factors just outside of her/his awareness: knowledge of pattern and technique; the trends of color and style, financial need, time constraints, energy demands of family and others, and, of course, tacit knowing of philosophical beliefs and restraints. The yarn supply, as example, offers choices within possibility, and restraints. If the weaver is also a spinner and materials and equipment are available the choices expand exponentially. If it is a production item that must meet customer needs and deadlines the choices retreat. Perhaps you, as weaver, believe that handweaving means everything should be done "from

scratch", or perhaps your project is pure enjoyment, the love of weaving and costs of time and effort are irrelevant, so your choices respond. As weaver, the choices are theoretically infinite but are defined by your view of the world, what you see as important, and what constraints are placed on you by the project itself, your personal commitments, and the greater community. The weaving as product is choices expressed, cloth of the weaver.

We turned back to the displays.

Plans for each weaving were always made with care but rarely, for me, were they executed without change. The only wallhanging I made was planned to be a fuzzy circle on a square background, what I thought I could do. Yet, in the weaving it became more than a circle, emerged from a doodle as shaped like a partridge, with lines drawn out to one side to indicate movement, and a "V" shaped into the body to indicate heart (depth).

Reaching Out. From the start of my weaving, I relied heavily on the community of weaving friends, the guild study groups and the weavers I met through classes I took. Class after class, I pursued learning to weave. Warp after warp, I practiced, learned and re-learned. Each teacher taught her own special way; each warping method was different. I learned some from each one, making warps, putting them on, taking them off, changing the plan, feeling insecure, asking questions, afraid to be bored.

As I think of the weavings that wove my life, I think of a spiral that was a series of warps, a series of textures, a series of patterns encompassed by the community in which it happened, the community of weavers that welcomed, inspired, prodded, encouraged, taught me and led me, pushed me and showed me, the weavers who looked at their looms and saw clothing, or those that saw color

combined in new ways, or who pressed me to teach them how pattern is made. We, as community, shared in the language, the images, visions, our weaving lives.

A question was asked about the blue coat on display. Gladly, I answered the question—with evidence of the passion that was once in its weaving. I referred to the two-inch pieces of yarn taped onto paper, the small model of the coat I had taped together, and the book with the picture of my inspirational burnoose so evidently unlike the finished coat.

The Blue Coat. The yarns in the wool shop fell into my lap. They drew themselves to me, they beckoned; I reached. There was vastness in color, in texture, in yarn size, a visual-tactile excitement, a veritable smorgasbord of exciting ways for my personal plan to emerge into a coat as I planned. Long hours were spent just playing with the color scheme, adjusting the two-inch bits of yarn stuck under "Scotch" tape in the planning of it, more hours making a miniature paper pattern, Scotch-taping it together to see size and shape, dreaming, imagining what it could look like, how I would wear it. How could an age-old pattern, a shepherd's burnoose become a jacket both ethnic and elegant? Why spend the time creating handwoven fabric for a unique jacket? What drew me to do it? What drew me to finish? I fashioned the models, the warp threads, the pattern, in many different ways, choosing, rejecting, changing my mind, adding a color, adding more gray, the white was too white. A choice then to make, I added a burgundy, one yarn-thread to add richness, the finishing touch. My models were such a small view of the warp, and the warp would be half of the finished cloth. This was my first view, beginning the plan, trying to visualize the cloth in its being, but certainly hard to envision the finished coat, a distant reality. Though the cloth was quite heavy, nine threads to the inch, from the start, it was patterned excitement,

not knowing the outcome, yet trusting the process, the feeling of color, the wonder and softness, the texture of wool.

Excitement of watching the color scheme unfold masked the tedium of winding and threading, then tying it on—so exciting to see how the colors and yarns became my pattern enlarged, forming a background of excitement and warmth, lying in full view as it waited to be wound on and woven.

Then came the weaving, one inch in this color, one inch in another, in which one would I like it to be woven? I would stand back, then, and look, trying to imagine what each would look like when/if it became a full piece of cloth. They all looked so pretty, drew me to weave them, but the choices were made, for this time. The others would wait until... The shuttle thrown gently, guided softly through the shed, was eased out and easily caught. The warp gently accepted the softly draped wool, and the scene slowly built, one weft at a time, each weft interlocking with this multi-color, multi-texture, quite unique warp, creating one row at a time, one set of intersections added to the one before, creating a web of something totally new, never before expressed.

The excitement of wondering what the finished coat would look like pushed me through all the stages until the finished coat-of-many-colors emerged from the yarns. As the weaving progressed, I mentally designed more warps, wondering always how "this" change would affect it, how "those" colors could be combined, how this blue coat project could come out again as a series of coats that I wanted to weave—one set in red and blue, others in browns, still more in neutrals, some more with pattern added. Each coat led to another.

The series of coats led to a series of scarves, then a series of placemats, and...

It served as admission to a community of weavers, first at a conference where it was my introduction to being known as a weaver. In itself it was tactile, warm, welcoming and became so in fact, as I joined others of like interest.

Wearing a new handwoven coat was truly the best way to have gone to my first conference. Everyone wanted to touch my coat, to know how it was made. No one knew or cared that I was a mere beginner. I was immediately accepted as a weaver because I was wearing it. I had stepped into the weaving world as a weaver. I had done weaving.

I was asked to write about it for the next newsletter. Years later, a young woman won a major prize with a blue coat that looked astonishing similar to my Blue Coat (though longer, more dashing, and more meticulously tailored). I asked her if she had seen my coat. She had. I had shared at that long-ago conference while basking in the feeling of community they offered to me! A ticket can be so much more than a small rectangular piece of paper, a conference more than the program sets out.

The blue coat is a project fondly remembered as "what weaving is." The intrigue of yarns, suspense in not knowing propelled me to finish it, wanting to see its emerging shape, knowing that yarns so closely intersected form webs of color and pattern that are often surprising, sometimes quite stunning. The usual tedium of warping and finishing were taken over by visions of what else could be woven—coats, table runners, placemats in pattern. From playing with color, texture, and wool I ventured into cotton, no-color, and pattern.

I gestured to all the woven articles draped around the looms. The products were many; all had stories to tell—but I stopped talking, for the products spoke for themselves. I watched as the viewers savored the weavings, touching and fondling them, holding them

to the light and to their skin, running questioning fingers over them, becoming involved as I had done in their weaving. I noticed that many spent a long, unhurried time with each piece, really getting to know each one before moving on. I was glad I had stopped talking, and allowed them this private time with my work.

The next display was there when each one was ready.

Making a Commitment. I thought about choices of "craft" and decided I liked to work with yarns (fibers, wools) because they felt good physically. I had done many crafts. Pottery could have been my choice but I didn't like the drying clingyness of the clay on my hands.

After much thought, I announced to my closest weaving friend that for the next year I was going to learn to weave. She understood and was thrilled. Other people thought I already knew how to weave.

My passion for pattern was developing. I ached to know how pattern was made. A course from a weaver in Montana straightened out my confusion about warping, and how pattern worked. This was a turning point in my understanding of weaving but I believe I had to travel the confusion-path for at least a while, learning from all the different teachers before I was able to understand/hear/see what she could teach me. This teacher knew the concepts, how one pattern can become another, how two patterns can play together. I kept asking questions until she told me all that I wanted to know, until she had answered all the questions I didn't know I had.

On the way back from Montana I resolved to teach beginning weavers so they would not have to go through the confusion I had. So I sold my big loom, bought 3 smaller ones, and set up weaving classes. I did it so thoroughly: I packed "everything" I knew into ten lessons, my Mastery Plan, but at the end of this tortuous course one student remarked that all she had really wanted to do was

weave a pillow. I had forgotten to ask the students what they wanted to learn! I did not allow them any input, thinking that I was going to teach in such a way as to straighten out all possibility of confusion—in ten lessons, most presumptuous!—the teacher as expert, and the naivete of partial knowledge!

Creating a Community. Community action kept my intrigue alive: the support for all and any endeavors, the show-and-tell aspect of seeing what others were doing, the warmth of the conferences, and the guild-community that I created and that nurtured me, pushed me into areas previously ignored. The weaving books and magazines formed part of the community and because I took classes from many of the authors, I knew a special kind of intimacy with their written world. People I met once a year at conferences became special friends and encouragers. Feedback from the newsletters I wrote was another community-creating medium.

From the safety of known local guilds, I ventured to volunteer with the provincial guild. I thought I was being presumptuous, but when I expressed the idea, my friends encouraged me. Without that encouragement I may not have left home base. I met a lot of wonderful people, learned a lot about weaving, and became known as a weaver in their community, achieving a sense of acceptance most important to me.

Then we moved. I took my spinning wheel to the Fair as a way to meet people who had interests similar to mine. I thought that it might be quite useless because I just knew there were no Weavers out there. Again I was presumptuous. I found there were indeed weavers out there but they had not yet learned how to weave.

Then came my real growth as a weaver, maturing, as a teacher of weaving. As I waded through the circles of confusion and offered to share my learning

through teaching I grew exponentially as Weaver in my struggle to teach what I knew and because of my need to expand my own knowledge base to include the non-weaver's way of knowing in my way of teaching. I found that I needed to learn what I had previously ignored as I was faced with the need for clarity for teaching purposes and the need for designing a curriculum that would be offered without advantage of the expensive equipment and specialized tools I had grown accustomed to. My love of weaving, and enthusiasm for sharing what had become my life became the only teaching tools I needed. There was little need at first to teach my understanding of the complexities of weaving. The passel of non-weavers eager to Become Weavers needed only be shown the basic how-tos and the wonder of possibility. They were carried by their own enthusiasm and imagination into areas and expansions that I hadn't thought of. These non-weavers quickly became Weavers in their own right, exploring those avenues they saw opened through my presentation of a range of possibility. Some quickly decided what interested them and zoomed in to produce and explore in fields where I had never played. Others needed more widespread exploration, wanted more structured technique, went on with more courses. Each chose their curriculum and pace. Each chose their topic and tools. All continued taking the lessons (from me) but chose what they would "learn" each time as they focused and selected both tool and technique. As "teacher" I scrambled to "keep ahead" but slowly the students grew out of their need, their dependence on me. Some chose to continue into my way of weaving (complex pattern manipulation). Most chose their own path, developed their curriculum to include spinning, dyeing, felting, quilting, other skills they wanted to learn. Some chose more free-form artistic expression and proceeded to consciously master technique. Others were content with the patterns they knew, exploring ways to add interest and color through other weaving ways.

I continued to work with the provincial guild, kept contact with my home guilds and created a new guild in the larger community of where I lived. I reached out across the country, teaching classes and preaching weaving and spinning.

Some courses did not draw students into weaving as I had come to expect. These seemed to be the courses that were set apart, disjointed, that did not build the community that would make weaving an on-going part of the students' world. They lacked continuity, the discipline of doing and sharing, and the feeling that we were teachers and learners together. These courses left me feeling bleak and helpless, set apart as "the teacher".

I discovered the real meaning of the weaving maxim, "Form follows function." Students, inspired through magazines and their own utilitarianism produced rag rugs, clothing made from rags, dish cloths, tea towels, floor mops. They were beautiful, inspirational, humbling.

I discovered in my students a patience and perseverance, a purism that showed itself in multitudinous ways. Some students showed patience in planning, would not reach out to learn a technique or do a project she did not feel ready to learn. One chose to weave rather than buy the trim she needed. One guild member came with such willingness to grow that she suffered through sometimes intense criticism with good humor, and is today a Master Spinner. Another student showed extreme willingness to try again, through severe illness of herself and her husband, willingness to participate wherever able, and is now reading and weaving patterns like a pro. For another, her optimism showed in her buying a second-hand loom and ensconcing it in the dining room where there was no space for it, nor time for it—but joy in its promise. Just recently, she took lessons again to remember how to use her treasure.

In the midst of this kind of commitment and enthusiasm for learning, I challenged myself to learn how to dye. My stock of yarns was becoming unwieldy

and I was dissatisfied with the commercial range of colors. I wanted more shades, unending choice for myself and my students. What I found as a limitation surprised me. Without a set of sample colors I could not know what color I wanted to make. I had become accustomed to seeing the models and making them my own. Without the models, the weaving examples, I didn't know how to begin. My students showed me. When I taught them what I knew about dyeing and spinning, they began to experiment. They found oven dyeing, rainbow dyeing, mushroom (and other natural) dyeing and their handspun yarns bloomed in all of the colors imaginable, and showed up in their weaving.

Though each weaver chose different focuses at different times, most helpful, I think, were the sessions, done monthly, where everyone practiced what others had learned. We met (still do) and brought products to show-and-tell, set dye-pots and spinning wheels to work as we talked. Sometimes we invited speakers from "outside"; sometimes there were courses set up to teach specifics. There were exhibits, fund-raisers, field trips, and sheep-to-shawl contests. I was drawn to learn and to learn to teach. We argue today about who has gained more, students or teacher, and it is impossible now to tell who is teacher, who is student.

The richness of my built-community was/is astounding. I am still drawing on it.

The Death. As I was pressured to make money, as I was pressured to "make one for me in blue" (or white, or yellow) and as I succumbed, production became my curriculum plan and I lost my reason for going into weaving in the first place: the pleasure of it. My purpose was changed from learning how it works to looking at how quickly something can be woven, and how cheaply the yarns could be bought. It changed my designing from individual-thread experiments into series of four-color blend jackets and two-color lace scarves. I abandoned the intricate

patterns of Colonial overshot for the simpler lace pattern designs, the playground of multi-color designs for natural-white table runners—to save time and material costs.

I did not enjoy doing work to other people's specifications (commissions) though there was a repetitiveness to some projects that was quite enjoyable. The sashes I made had a rhythm in weaving them that was satisfying. I was able to make one every one and a half hours, so progress was visible. The colors were bright and the pattern was one that grew as I wove. I could also see that as each set was finished I was "making" $100—easy to count, easy to see. After a couple of years I was tired of them and production took a turn for the worse.

Through a series of contacts I discovered a need for the precise replication of grain bags, so I accepted a contract, together with another weaver. Foolishly, more than innocently, we took on this project that was much too difficult for a hand loom, one that no one else would attempt!

I felt compelled to talk about them when some participants came to look at my grain bags. I talked of the trauma.

The Grain Bags. Thump, thump. Each thump of the beater shot excruciating pains straight to my temples. I had to beat hard, the cloth needed stiffness. The shuttle wrapped with stiff cotton threads flew through the shed. Most times I caught it before it clattered to the floor. Then beat, beat, change shed. Throw shuttle, beat, beat. A crowbar was taped to the beater for weight. Repeat, repeat, one weary thread at a time, two threads to a row, twenty-two rows to the inch. Striving in this to keep rhythm and beat relaxed and even. So the weaving could have selvedges that appeared straight and cloth that appeared to have no errors. The monotony, the sameness gave way to small progress. Would ever

another inch be woven? Then out with the mirror I'd check the underside. The cloth had to be "good enough". How many errors? Errors meant hours hand mending, looked ugly... Could I continue, or would I have to undo it, and go through the pain of it, again, trying again. After forty-five minutes, when I could stand it no more, when the beat wasn't even, when it was no longer relaxed (relax under such tension! How could I ever?), I would leave it, crawl out and away, knowing I had done as much as I could, really couldn't do more, for now...

What good was this commission? What good was the money, when my image as weaver, my confidence, the fun-of-it had been desperately eroded, and ultimately destroyed? How could lowly grain bags, double woven (tubular), 110 threads to the inch, replication from times past, with its tiny blue stripes to be precisely placed... who would have thought the production/reproduction would defeat me?

So nearly, it did. Two twisted ribs, and whiplash, but six bags were finished. The end. The end of the bags, and the end of weaving for me—for a long time.

Selling my Looms (and my yarns and my books). Then my life changed. I had reached a plateau in weaving where I needed to find new direction, a new interest, the old ones had dried up. I had learned how the loom worked. I knew how pattern was made, and I had taught my students everything they needed to know (that I knew) for the moment. They were busy practising and experimenting, learning on their own.

A decision was made. I would sell all my looms and buy a computer. The selling became a major cutting-of-cords, a harsh break that had to be clear-cut or it wouldn't be able to happen. Some of the details of yarns sales were tedious, and I was constantly torn with wanting to keep some of them, not knowing which ones.

When the last spinning wheel left, I almost ran after it. However, when the books (and some yarns) were being bought with such pleasure, I felt good that they were going to homes where they were wanted and would be treasured, used in new ways. Thinking of their use in loving hands made my parting acceptable, even right.

Maintenance. When I was asked to teach (re-teach) a course, I approached it with trepidation, not knowing how I would feel about doing it, not knowing if I would remember what I used to know. I did. I loved it. Like always.

Rebirth. When I accepted that I would/could use weaving in my writing (at University), I was reluctant, then surprised that I could bring the dead world of my weaving alive again in a new way. It is good. Yet certainly a question comes up: had weaving, for me, reached maturity and ultimate death? Can/should it be revived? For now it is writing about weaving that takes me back to weaving in a new way.

But then, my new loom is on its way!

A few people asked about my new loom and what I "planned" to do with it. I told how preparing for this presentation and working to put this conference together brought me back to weaving in a new way, with how what I would weave still eluding me.

I related the story of Tawa recently visiting me, and offering to lend me a loom, one I had sold to her many years before—because (now) my house really needed one, she said. I told of how difficult it was for me to have it sitting in the living room, challenging me, making me feel that I "should" weave something on it—so difficult that I stashed it in the spare room where I wouldn't have to see it. I struggled with why it was better in there. I

could see no colors in the loom or on it; there was no color luring me into it. It wasn't even gray, there was no blankness to fill, no blackness to draw me.

I told of how next, I bought a big loom, resold it to Tawa. It had overwhelmed me, too. And now that I have become involved in my weaving again through this conference, I am feeling drawn into wanting a loom—a new kind of loom, a multi-harness loom, one I haven't even seen. Telling my story of learning to weave has brought me to remembering that I once wanted to work with color, was encouraged to do so. I feel drawn, once again, into color ways and color weaving—yet I still don't know what I want to weave!

Once given an audience interested in weaving, I talked on into the night with old friends, and new weavers, for I was beginning to feel that everyone at the conference was a weaver. The next day promised more weaving.

Day 2

A glance at the program revealed that the weavers were all known to me. There were long term friends; ones whose weaving lives grew together with mine, over the last fifteen years: weaving buddies, students, and other friends I had met and enjoyed through workshops and courses. Our lives had taken seemingly different paths and though their stories are long in my memory, recent informal conversations and reminiscences had renewed my contact with them, specifically for this conference. Except for the ones who are my students, all were weavers, knew how to weave before I met them. We took only a few formal courses from each other though we gathered together for workshops and study groups, learned from each other in both formal and informal ways. We asked questions, critiqued and made suggestions about each other's work, shared our ideas and our weavings, struggled together to learn and to teach. We both influenced and were influenced by each other's work.

All of us were those dedicated weavers who continued to weave even during summer vacation, who branched out from weaving and yet came back to it again and again.

Yet each of our stories is different. Each chose different rhythms and reasons, had different goals and motivation.

The weavers had each arranged a display of their work that when viewed as a whole created a warm weaving atmosphere but when taken separately, each had a character very much its own. The narrator indicated that the speakers have all been weavers and teachers of weaving. All have offered their work to public audiences through sales and exhibitions. Most have won prizes. All have been active in local and provincial weaving guilds to some degree, some more than others. All are still weaving, call themselves weavers. They had been asked to comment on (1) learning to weave, (2) planning, motivation, and discipline, and (3) their involvement with the guild community of weavers.

I passed the large architectural hangings and allowed myself to be drawn to the first clothing display, a colorful array of coats. I relaxed, settled in to listen.

Workshop #1: Sewing it Up — Joan

Joan's display area was crowded with coats and more coats, a space of bright colors and complex patterns. Hanging among the coats were some woven designs tastefully displayed as pictures, pillows, and bed throws, a handwoven sheep, and a large set of multicolor afghans. I was reminded of her home with its many handwovens amidst the maple furniture, tasteful and coordinated. Her weaving room is large and has everything set out, ready: shelves of wool, rack of books, sewing machine, serger, cutting table, and all the little knick-knacks (plus a TV and small couch!). Joan herself was dressed in a handpainted coat and a pink T-shirt with black sheep and clouds on it. Her coats and tops are sometimes truly outrageous and wonderful.

She talked about her initial intrigue with weaving.

> **Meeting a lady long ago who wore handwoven clothing produced a commitment right then that someday she was going to do "that", though she never got to it for years. She didn't know any weavers where she lived, but when she**

moved back to Edmonton, she saw an ad for off-loom weaving, took the lessons. Learning to warp a loom, she took the same beginner's weaving class from the same teacher twice.

For the first lesson she needed a lot of help. At first, one or two warps got thrown out, just "garbage". One rust and white doll finally got thrown out because she just "couldn't warm up to it." One warp that she bought for placemats sat around for years before she offered it to someone else who was delighted to have it. She went through a not-finishing stage because she would lose interest in it, more with the sewing than with the weaving. But because she felt she couldn't afford to throw it out she let it sit unfinished. Later she learned to over-dye to change the colors she didn't like and many weavings were recycled.

Joan showed us two of her re-cycled weavings. A large set of white-with-teal-stripe curtains had become a throw, a jacket, and more by dyeing. When the white was dyed medium brown, the teal stripe became dark green. A wallhanging originally in many different white yarns and a centre ring of brown around a white centre was sprayed with one color of blue but with less in the centre for a gradation of color, dark outside to more white though still blue near the centre. Now because of the variation of yarns and the variation of spraying technique, the hanging has taken on a darker but more interesting, richer set of color tones. Yarns that were not evident in white are now each a unique blue. Visual interest and the richness of texture were added by one more bit of effort.

She continued with a remark that she is always re-making, so she has a use for each weaving. "Recycled weaving pieces make excellent polishing rags!"

The turning point in Joan's learning to weave was a class from a Finnish visiting weaver that helped immeasurably with warping, showed tricks that changed

her whole way of weaving. What was chore became faster, she became happier with warping.

She took as many lessons she could for a long time, thought she would get exposed to something she didn't know, wanted to know more and more—about: fabric for clothing, color, designing fabric, sculptural weaving, complex weaves, and so on.

She tried teaching, enjoyed it while she was doing it, but she would rather weave so doesn't teach any more. Likewise, everyone raved about how much fun spinning was, so she took a course, tried it but didn't "cotton-on" to it.

She was always planning three projects ahead, couldn't keep up to weaving all the plans, would go to bed thinking, "Oh boy, I must do that, get started on this." Doing one project led into three more. She has never been bored since starting to weave. There is always something to think about.

When she started, she was buying yarns by project, then she started buying yarns she liked when she saw them, now has a stock of her favorite colors.

She became obsessed with weaving when she moved to an isolated place in the country. It was a self-imposed isolation from life (movies, malls, etc), but she had customers, wanted to weave or travel—but not into town. There, she had large blocks of time to work, would weave long hours, six at a time, and was obsessed with knowing how each weaving would look in this yarn and that color. She was getting to know pattern more and more. Her husband and kids encouraged her; the kids liked woven clothing. This support was important to her.

She has done a lot of weaving, and has always woven coats. She wove her own drapes and lampshades because she wanted the finished product. The rest of her weaving has been some variation of coat, or afghans in color effects and "summer-and-winter" patterns that came out of seeing a small sample of a red, white, and blue pattern at a workshop in Montana. She kept changing the pattern

and messing around with it, enlarged it, then wove afghans in greens, pinks, blues, etc., then one in her own colors—six blankets in all. It is most unusual for her to do that many, even in different colors and sizes.

The endless series of coats started out with weaving a cape for herself that she thought she would like but found uncomfortable to wear. It became a jacket, and that jacket pattern kept cropping up for many years as her style of woven coat. She was swamped with orders from ladies who had never seen woven coats her style, made them for six years and then decided to branch out. The coats usually started with an order, and a particular color and yarn. As a subscriber to Vogue patterns, she was aware of what patterns were available. Knowing tailoring and of course, knowing weaving, helped her put together the patterns, yarns, and colors creatively. From a love of coats and one favorite pattern, making slight changes in pockets and collars, trying them collarless, putting a stripe down the left side, or creating an off-balance design, she had a lot of fun. Today, each pattern is her own design; she makes only one of each kind. Tired of sewing for other people, she now weaves and sews for herself and her family. She just finished a piece of fabric for a tailored coat, but it is too soft so will probably become a coat of more casual style. She bought a handpainted coat because she liked it.

Joan loves working with colors, likes to watch the colors come out, unfold in the weaving. It gives her a thrill. She is not a painter so uses weaving to express her love of color. She now has yarn for which she has outgrown the colors—they do not appeal any longer—and has learned to start with a section of the color wheel that are her colors. Though she decides the colors before beginning to weave, she is prepared to pull it all out if it doesn't work.

She likes to design as she goes and considers weaving to be a true release of, for example, anger at the world, almost medicinal. Color, yarns and praise have kept her going. Selling as incentive helps but people here are crazy about off-

white and she gets bored with off-white because she likes color. She refuses to do all white. Moving into an area where people are interested in her weaving was incentive in itself.

Joan confessed that she doesn't have to weave day and night like she used to, though if something is on loom, she wants to get back at it. She loves the doing of weaving and when traveling seeks weaving villages, goes as often as she can. She doesn't have many products on hand; usually sells them or gives them away.

It has always been important to her to have girlfriends to chat with, shop with, go to plays with—and only now some of her girlfriends are outside the weaver's circle. Now it is important for her to get out and see other people, even in a mall for a couple of hours, and she doesn't weave as much. In some ways, she is bored with it, feels a need to "get her mind going", so has all of a sudden decided to buy a new, more complex loom for "messing around with more complicated weaves", to get deeper. No matter how much she learns she always just touches the tip of the iceberg. There is more than she can ever learn in a lifetime.

For a while belonging to a guild of weavers was important, enjoyable. She enjoyed doing the rounds of executive positions, but was willing to leave it to move to the country. Though she was active in the country guilds, even helped host the last conference, the competitiveness of juried exhibitions has lost its appeal,... but, the annual conferences are still a place to visit and see what everyone is doing. She admits to coming home hoarse. (personal communication, 1990)

Some of us lingered to look more closely at the woven coats but were drawn to the next speaker as she started to tell her story. I was intrigued by the home-spun quality of

her display. Tawa's area gave impressions of sheep and growing things: comfrey, teasels, wool, and children (grown now, of course). A handwoven cactus stood stately off to one side. The blankets and scarves, the cozy warm things to wrap up in, were all in the soft colors of natural wool: creamy white, and all shades of grey, with some hints of black. The yarns were all handspun, soft and fat. The handwoven clothing was soft and unique, folksy. Tawa was saying that she has never considered herself a weaver. I moved in to listen.

Workshop #2: Diapers Count, Too — Tawa

Where she grew up, Tawa had never seen a loom, though now lots of weavers have moved in to her hometown from somewhere else. After moving to Tucson, she remembers wanting to learn to weave. She saw a lot of native weavings there. Though she didn't necessarily want to do native weaving, she wanted a loom. She had never seen one, had no idea where to buy one, but did not research or try to find out how, as she was busy taking botany courses. After moving to Edmonton in 1968, she found out about a weaving course but didn't go. It was winter (-40°F), the class too far away, the truck wouldn't "go", and using the bus was too difficult. That students had to share a loom discouraged her, but from finding out about the course she met two weavers with whom she still keeps in touch, friends.

At the time, a woman lived next door who was a weaver. She told her how to buy a loom and contact the guild. Tawa seriously wanted to weave. She bought a loom in the spring but didn't unpack it, for she knew she was moving. That fall when she moved into university housing, she put the loom together (22" table loom with stand) in one bedroom upstairs and then figured how to weave, put on warp, had no instructions. She admits to an enormous patience.

Someone introduced her to ordering yarns so she ordered a very big box from Prince Edward Island, then got into ordering yarn samples. She doesn't remember having a problem learning to warp, but remembers helping a neighbor and having trouble with that. Tawa tends to use very coarse warp that is "somewhat easier to work with than finer yarns." It was after she had done something on the loom that she fell in love with weaving. She liked the manipulation, working with yarns and fibers, but had no particular interest (still doesn't) to replicate patterns or plan projects; she was just fascinated to be dealing with textures and fibers.

Twenty years ago at a students' union course she debated whether to weave or to take a pottery course. With pottery she knew she would spend more time cleaning up the mess, so chose weaving because she could leave things half undone without cleaning up. She had two preschoolers at the time: "How could I change diapers with hands full of clay?" -Pottery can't sit around waiting to be used, it hardens. She liked the end products of both but in weaving she loved the process, the raw materials. Though she signed up for the course, she only went once or twice but met another weaver and they became very good friends; a friendship that still lasts.

Tawa began to weave in quantity, selling a lot at low prices, often at fairs or by consignment, weaving that could still be worn today: rectangular-cut jackets, shirts/blouses; "fringey" purses; and inkle loom belts. She used simple designs and handspun yarns in the clothing. Most interesting, however, were the wool rugs (3' x 5') that would be saleable today. She loved making rugs, but then the prices of yarn went up, and it became not worthwhile to do rugs for the market anymore, became not feasible.

By now, she had bought sheep and this totally changed her time allotment, so the selling of weaving changed, too. No longer weaving inexpensive things

especially to sell, she began to make blankets to use and rugs for presents. She no longer focused on selling. For one reason, her husband's income had increased and with sheep she chose to sell wool rather than weaving. She raised Lincoln sheep that produced a wool particularly suited for spinning and weaving and not otherwise available. She really liked it.

As a group, she didn't care for the guilds but had an enormous amount of fun with individual weavers and with people in the sheep world, men and women, at auctions, sheep health symposiums, etc. Farmer's markets were fun. She was really interesting in selling wool, could only sell washed and prepared wool where she lived so traveled to more rural towns where the spinners wanted it raw, to be touched and felt, where they enjoyed it. The local guild served as a friendship group but individuals, especially those interested in fibers and spinning became important friends. Once she had sheep, people who talked about weaving and yarns to her were not in guilds, except a few.

I paused to reflect that I was one of the "few". I had met Tawa at a guild meeting. At one session, she was sitting on the floor talking about spinning hair from her husband's beard, when suddenly I remembered her last name and connected it with her husband whom I had already come to know. From there, we became friends, found we had many common interests.

I turned back to listen.

What happened was that though she had previously ordered and used a large amount and variety of yarn, especially Finnish and Swedish, when she had sheep she felt obligated to use the wool from her own sheep. That got her into a rut, got boring, but also got her into a different world, still selling. After participating in a backstrap weaving course in Guatemala in 1977, she became

interested in taking courses that had to do with weaving and textiles. She went to the university to take design courses, expected to do weaving there, but because she lived in the country, had two grade school children, and all the design courses were offered either at 8 - 11 a.m. or 2 - 5 p.m. that didn't work out. Instead, she took courses that were taught over the noon hours, history of textiles, geography, archaeology, for example, those with no studio component. "It wasn't second-best choices, just choices!"

After having been intensely involved in textile history, in writing and researching aspects of archaeological textiles, and in doing museum research, Tawa now feels she really wants to get back into doing more weaving. She still makes gifts and such, has all along, but usually those that are quickly done.

Tawa doesn't think of herself as a weaver because she has no particular weaving goals. She reads all the "academic literature" on the world of textiles. She also reads lots of weaving magazines that say weavers are supposed to continually improve their techniques, but she is happy with what she makes, considers herself "not a bad weaver". She weaves because she likes growing things, such as kids (children), animals, fabric, textiles: she likes to watch them grow, likes making things. "Making a rug is like growing a garden." She sometimes buys textiles or yarns, then can't bear to use them; she just admires them as they are. She buys to weave, and also buys weaving. Magazines often imply weavers have to sell weaving to justify it. At two major conferences she heard talk about hobby weavers destroying the market, and could not relate to that. She has no desire, even secret, to become a textile artist. She likes to weave because she likes having the excuse to have all the yarns, likes using them and making things out of them, has no implicit reason for doing it, doesn't need more rugs, doesn't need anyone to admire it, may never use it or wear it, but likes fabric that comes off the loom.

Tawa is very interested in textiles, was before she took courses and did a master's degree in it. She loves textiles, is interested in the history of the technology, has found a niche there. She has a good understanding of textile structures and history, but not an extensive knowledge about the different kinds of spinning wheels (though she has 3) or how to fix them. She simply uses them, likes to spin to make yarn. She loves animal and plant fibers. When she spins cotton she thinks of cotton plants, the different genetic strains and the history of them, how interesting they are, and the different fibre characteristics. She is fascinated with the kinds of cotton, loves brown cotton, treasures the little bit she has, doesn't spin it, just treasures it. When she spins wool she actually thinks about the history of different sheep breeds. For example, when spinning Columbia wool she finds it interesting that it might have come from a cross of two sheep breeds.

For Tawa, weaving has no goal at the end. She is as interested in the process as in the final result and will make and re-make a yarn, for example, until it becomes her purpose. She is interested in the quality of fibers, thinks and reads about such things as weaknesses of fiber and problems in animal health and nutrition. She is not so much interested in the quality of the end product as the types of materials that have gone into it. Tawa has experimented with dyeing but when she concluded that so many dyes are toxic and that she didn't have an appropriate means for disposal of them, she realized that at her level of workmanship ("lackadaisical"), she had no business getting into toxic chemicals. She is very interested in natural dyes but as a textile historian, not as a user. She will buy dyed wool though she hasn't dyed it herself for twelve years.

Tawa considers a "neat thing" about natural fibers is that they are not permanent forever. If she wanted curtains hung in the sun to last, she would use polyester. Silk or wool curtains would deteriorate but she would choose these first

because curtains are not meant to be permanent—all meant to be impermanent, she feels.

She often takes her spinning and weaving outside. Spinning dirty wool indoors makes a mess, so spinning is seen as seasonal. And, her weaving generally depends on her handspun yarns. Since weaving inside ideally is done in natural light, she installed a larger window in her weaving room. Previously she was too often fooled by color combinations chosen in artificial lighting.

She likes the loom "dressed" and ready so puts on very long warps in anticipation of weaving. The warps are not designed for a particular purpose and become an invitation to weave whatever plan becomes timely. For her, it is not a great pleasure to plan weaving, and not fun to put on the warp. She puts on a 15 to 20 yard warp and then makes everything out of the same warp. It is always there. She can sit down for 15 or 20 minutes, seldom has a project going that she is in a hurry to finish. She sets up her loom so she can fool with it, and that is pretty well all the time.

Tawa is really a mother at heart. She has raised dogs/puppies, sheep, and kids (children), grew comfrey for her animals (though they didn't like it), and now wants to grow dogwood for weaving baskets, and to grow teasels to make brushes. For her, weaving is growing cloth.

She tries to buy handmade products, feels a responsibility to support others in the field, so she attempts to buy gifts at local craft markets. She tries to buy mittens, scarves, not "art" pieces. Also she weaves with wool and wears wool, believing it important to support what she believes in. If she lived in a different climate this would more likely be cotton or linen. (personal communication, 1990)

I was drawn into the atmosphere of wool and natural products, felt relaxed, yet exhilarated. Thinking of a loom sitting in my studio warped for nothing in particular

seemed quite intimidating to me, not the freedom for expression for which Tawa sees hers. My projects were always carefully planned, though when I think of it, rarely did those products emerge according to plan, unless they were required to do so by the rules of a commission or production consignment.

It was lunch time already, and disappointment set in as I realized that there would not be time to listen in on all of the weavers' presentations, that I had to choose. It was a difficult decision for I knew and appreciated all of the weavers present. I wondered how others decided which ones to listen to. I asked a couple of people balancing their buffet plates next to me. They seemed to be drawn by the aura presented by the products displayed and by the person of the weaver herself. They admitted it was not an easy decision, and often simply wandered from one to the next.

I elected to mingle and listen to the views of others and why they chose as they did. One weaver exclaimed that teaching is so different from weaving and wondered aloud how this conference can pretend to compare them. From there, much talk ensued about our different views of weaving and teaching. I glanced at the program and wondered, indeed, how different were the views of weaving alone! A glance at the room full of weavers' wares was evidence enough! And, reflecting on curriculum views showed more difference there, too. More difference would happen during the conference itself as we each chose different weavers to listen to, and different curriculum sessions to attend. Expressing this aloud simply led to a chorus of groans, a lament that we couldn't take part in it all—and a confusion of expressions, excitement and questions about what each of us found the most compelling to attend. One chose the huge wallhangings I had passed simply because they were so architectural. Another had seen the soft fuzzy shawls that Kris had, and was drawn to their texture, as I was to the fibres set out in Tawa's display. Another was drawn to Tawa's display by its title and a question about what diapers could have to do with weaving. Interesting, I thought, what intrigues will draw us.

After lunch, we were invited to take in a third display. I passed by the one that promised to talk about Mastery Weaving tests—with a slightly guilty conscience, I admit, for I had promised myself to do those tests one-of-these-days. I chose a display with a different milieux.

Workshop #3: Choosing the Bits — Beany

Beany's area showed three distinct parts. Above and behind the tables hung ethereal hangings (transparencies) that changed with the light and any movement that disturbed them. The pictures on the hangings were of birds and flowers, exquisitely done in many shades of bright bird-flower colors on natural linen backgrounds. The tables were covered with soft, thick rugs in a soft blend of natural greys and blacks and evenly handspun yarns. On a rack, quite in contrast, were hung a myriad of bookmarks done in bright smooth yarns with complex "inkle" designs. Beany began to tell of her choices in learning to weave.

Beany got into weaving while living in Manitoba, working as an advertising artist. A course in spinning, dyeing, and off-loom weaving was offered. It was very primitive. She had to buy raw wool and clean it, did a sample in the 1970's chunky style, didn't really like all the tassels, and did some circular ones, a cushion cover. Her instructor whose Swedish loom took up two bedrooms was doing huge woven wall pieces for dentist's and lawyer's offices, tapestries on the loom. Beany found doing a little tapestry, 12 inches by 12 inches very tedious, but she could see that they could be whipped off in a day with a big loom. Maybe one could spent a lot of time planning, but the actual physical work on them would be a lot less—and all those beautiful fibres!

Moving here, she couldn't find a course in which she could pick it up again, didn't know where or how. She appreciated good material, just wanted to know how it was made.

Then her friend, Martha (next speaker), told her about a "wonderful discovery" [Karen Note: this was me!!!] and together they went to see how a loom worked and arranged for a beginners' weaving course. She found the course good because she could use all of the looms [I had built]: the fibres, textures, techniques, and the Salish and tapestry looms were almost automatic! To her it was a good progression, others couldn't handle all that exposure at once, got lost, but it showed who was interested. Almost immediately, she got her husband to build an inkle and a rigid-heddle loom.

Once she knew what looms could do with very little cost, then that is when she really got serious. At first, she wanted all those colors, bought a skein and split it with Martha, the practical side showing. She and Martha shared tools and materials, and even work, still do, though each does different things. Beany has never done any clothing; she knits. She is still doing inkle bands on the loom her husband made.

Then, she was shown a floor loom. "You (Karen) put me on one because you knew I would want to buy one." Then, she had to figure out how she could afford one. "You knew I was hooked and you also knew Martha was hooked, too. Did we share a loom, too, Martha?"

Beany was "hooked" because there was no need to "fight" with a floor loom. Two hands could be going at once. "It was just beautiful. It was just a dream. It still is... can't understand how I can be so thrilled with a floor loom." She had seen a loom, and knew there were steps to get there, and had the patience to get there. Being practical, she had to try it before buying it. Now, she refuses to go back to using the "more primitive" table looms.

When she first sat at the floor loom, she was comfortable with plain weave and though she didn't know how the harnesses and treadles worked, she knew about rhythm from the inkle loom. Now, as she studies more and more, she is not

overwhelmed by the complicated patterns because she is beginning to recognize the weaving connection between feet and eyes. However, she still does mostly plain weave. She is not finished with it yet, has not mastered it (self-declared "perfectionist"). She thinks she "should" take the Master Weaver tests to get out of plain weave, but thinks she could spend a lifetime with plain weave. There are so many more combinations using other patterns but plain weave is beautiful because you can do so much with textured yarns, spacing, and with rugs.

Beany chose her weaving curriculum carefully, chose two techniques: rugs because "everybody needs a rug" and transparencies because of their visual-ness. With transparencies, she can practice design and learn about yarns, and eventually do tapestries. She feels the need to practice design as it pertains to fibres, simplifying the design, and creating/working with rhythm, balance, texture, all those elements of good design. Transparencies are a quick and "cheap" way of practicing these and yet they are functional. "You can make window valances." She will tie up her loom all summer with transparencies. Doing about six inches a day, it is a slow process.

Rugs are a way to use her rags, and wool, which she likes. She spins all her own rug yarns, another skill she needed to learn. She loves color, especially the natural colored wool patterns and would like to get into Navajo or krokbragd (rug designs that are tapestry-like) where you can do lots with color. It takes a lot of studying to do Navajo rugs because there is a lot [of meaning] behind the designs. With plain weave rugs, though, the weave enhances the character of the fibre, so fibre (handspun yarns) is the thing, not pattern. In transparencies, yarn and color are important, not the pattern. The ones she does now are "nicer" because she has learned to take out the excess elements that don't do anything for the design, extra lines that aren't needed. She tries for a simple but effective statement. Besides, plain weave rugs take less yarn. Her next rugs will be

patterned, though, because she has mastered the selvedges, end finishes, and how to warp with linen. She has decided she is ready to go on to the next step. Meanwhile, she is doing window valances (transparencies) to make money. It will take a lot of time to spin for the next rugs.

She is still partial to natural dyes, wants to use different grays and overdye them with onion skins, then use the golds and gray-golds in the rug patterns. She grows dye materials: parsley, rhubarb and carrot tops, onion skins, several kinds of flowers. She likes the brilliance of chemical dyeing but it doesn't appeal as much as the natural colors. It stands to reason to use natural dyes with natural fibres even though you are still using chemicals (mordants).

Beany's whole life revolves around weaving, even her garden. It is enjoyable to live to express and this is the way she had chosen, because of space and the cost of materials (in other crafts, such as quilting which is space and cost consumptive). She has no sheep because of the time needed to look after them. She is planning toward earning part of the family income through weaving, as a small business because she prefers living in remote (rural) geographical areas. She wants to do the Master Weaver tests for knowledge, and for the credibility. She knows she will learn a lot and there are some parts she really wants to explore though she is not sure this is the time in life when she is ready to do them. They are part of her ten-year plan, when perhaps then she will be ready to go out and teach. She can start now. She does very little teaching now, would rather do her own work and build the confidence she feels would help with her teaching.

Beany was active in setting up and maintaining the guild. She admits that sometimes she gets "a bad attitude" but without the guild she feels she wouldn't broaden her horizons as quickly, would need more exposure to magazines, would run out of ideas. The learning process is quicker because there is a whole range of

people showing what they're doing and she can—not take their idea—but say, OK, I'd like to do that.

Beany wants to weave to express herself. She is more inclined to the artistic part but wants to apply practical-ness to art, have something useful. There is so much one can do. It is just a medium. You can hang it, walk on it, wear it, carry it, do anything with it, even sleep on it, in it. Fibre is important, especially for rugs and tapestries. Every fiber has its own characteristics, cotton, linen, wool, its own personality. Fibre is different than fabric, less smooth, but in weaving, textures give character, cannot be copied. "Making something to enhance your home, enhances Self." (personal communication, 1990)

Beany chose her curriculum carefully, from an artist's point of view. She is working on three projects but one step at a time, patiently, toward a long-term goal. When asked to tell her story she said, "Sure, use my story if you want to but it isn't finished yet." She has a vision and lives it. It is her way of life.

At coffee break, I joked with Beany—and Marg had come over—about the Master Weaver tests, their fussiness, and Beany's and my resolve to do them someday. We decided, perhaps, that there is a time in life to do them, and joked about how they could be mandated, so everyone should learn their old-fashioned way. Then, we joked, all the weaving would have a consistent tone to it and it would surely be a grain-bag curriculum.

Consistent with time-marching-on we went back to the weavers. Again I passed a session that I knew I would enjoy. Dyeing would bring back the color motif that has been missing in my weaving life, but I was drawn instead to the tactile crunchiness exuded by the plateful of Weavers' Cookies next to Martha's display.

Workshop #4: Trying it All — Martha

She stood amidst an eclectic display of handmade, handspun, handwoven; a potpourri of willow baskets, willow wreaths, handmade clothing, shawls, and rugs. Her area was filled with an old-fashioned homeyness, and we were welcomed. We were drawn to touch her weaving as she talked, her voice calm and quiet, though barely concealing her excitement in talking about the vitality of weaving to her way of life, to her life of weaving. We became one with the feeling of what her weaving was to her.

Even before she moved to her country place, Martha was raising sheep and had stockpiled a lot of wool. Then, when living in the country, she tried to find how to use the wool. She knew that wool felt good and that she had to learn more about it. It was the spinning that interested her but no one where she lived spun. When she saw a weaving-spinning demonstration at the Fair, the loom didn't interest her but the spinning did.

This was the weaving-spinning demonstration that I arranged when I "took my spinning wheel to the Fair". It was my woven coats that Martha became interested in, and thereafter, she became my student and, together with Beany, major components in the guild I organized and they have maintained.

Later, when she saw woven garments, she got interested in weaving. She never realized she could make her own fabric. She bought a brown jacket, and for the first time saw fibres woven into something and then made into a garment. She liked how they felt and looked, and was impressed with their uniqueness. They looked handmade, different from machine-made cloth. When she saw them, she wasn't afraid to tackle weaving.

Sharing her excitement with her friend, Beany, the two of them approached the weaver (me, Karen!) and asked her to teach them how to weave. In the first

course, Martha wove a circle on a piece of cardboard that became a tam, a wallhanging on a metal frame, and a vest that has become a companion over the years. At first, she didn't like the vest, but during a dyeing demonstration, over-dyed it and is still wearing it. "It is skimpy, but nice for the back." She didn't know what colors could do, but it was all coming together. She could afford half a skein (shared with Beany), and it was great!

From these primitive beginnings, she got a tiny rigid-heddle loom and made placemats and a variety of things. The placemats are still used on her table. Buying a regular floor loom, she set to making another vest. This one needed a bias trim but nothing in the store matched it. The machine-made trim "can't be blended with handmade" cloth. So, she bought more yarn and wove the trim. She is proud of that, has saved the rest of the trim to make her husband a vest, too. She likes trying different things, finds it boring to stay on one thing—except rugs because no two are the same. She receives compliments when she gives rugs as gifts.

She got into sheep-to-shawl demonstrations and contests. Making the warps became her interest, and she was able to use a variety of handspun fibers including silk and angora.

Learning to weave led her into spinning and felting. She made felted rugs and mitts, teaches felting occasionally. She decorates other projects with weaving. For example, she might make a woven pocket and fill it with dried flowers. She has learned willow basketry and made many willow wreaths. It is a functional craft. There is no end.

Mostly, she weaves rugs and shawls. She loves rugs, and the beautiful fibres. She doesn't need to follow a pattern, each rug is different, and always seems to come out nice, may even be done in one evening. Sure, spinning and dyeing the wool takes time, is hard on the back and legs, but in a day she can make

enough yarn for a rug. Martha doesn't buy yarns now unless, rarely, if they are a "good deal" or for a special purpose. She wants to make them and her whole project herself. She likes handmade fabrics from handspun yarns whether silk, cotton or a blending of different fibres. She likes creating these yarns, then putting them into yardage. It gives her such satisfaction [and excitement, to be sure!]. Wearing something totally handmade ensures that no one else will be wearing something like it.

She doesn't go into fine weaving, likes the lumps, bumps, and textures of bulkier cloth. She still wants to make some fabric from "that yarn" that she spun with the silk noils carded into it. She wants the noils (lumps) to show.

There are very few adventures in weaving that she didn't try, always ready to learn more. She likes to use simple patterns in a variety of projects. She is kept going by experimenting with new fibers, wanting to know what all could be done with the materials, and then "having" to see what they could do. She learned more from workshops and the guild than from magazines. The annual retreat she organized has become a learning and sharing experience.

Learning from "our guild" has meant organizational work for Martha, yet she thinks of "our guild" as "neat" because nobody does the same thing. Some go back to synthetics or have a loom, but she doesn't call them weavers. Others are intrigued enough with weaving, and with cloth, that they weave somehow, even if it is little, through health and family problems. They are weavers.

The important thing is to be weaving. Her thoughts are always on what she is weaving/going to weave. Often the colors are planned ahead and she changes them as she weaves because she doesn't like the way they are coming together. She could weave all day, if she had no interference, sometimes weaves into early morning. She thinks of it even when she is not at the loom, thinks of the yarns she should be spinning, has several warps made ready to go on to the loom as soon as

possible (after the company is gone). She would rather do it than Christmas! It is a thread by thread accomplishment. Spinning makes it better, involvement makes it better. Compliments for gifts "made from scratch" are encouragement. To her a piece of weaving is a piece made with loving care.

She has been working with wool because she had wool handy and has been dyeing it, wanting to weave and have the colors complement. She is still learning, hasn't woven enough to say she is experienced. She avoids fine work that would require more time than she wants to spend on it, and, perhaps, getting more serious. She is afraid it might not be as relaxing, not as much fun. Until now, she has been doing just what she likes but thinks that "as weavers we should try everything." She wants to cover the whole world of weaving! As she weaves, she wants to keep creating different things.

She likes rugs a lot, and wants to get more into placemats, things she can use around the house every day because she doesn't get tired of something she has worked on and accomplished. Though avoiding heavy pattern she has recently "gone into" more patterns [in her rugs]. She likes creating them, learning what the loom will do, and coming up with different patterns on her own. The more patterns she can use, the more interesting a rug (or other weaving) is. And "when it seems like you come to think you've learned just about everything, there will be either a magazine or somebody will come up with something else—like, how many sheep can you make with wool?" (personal communication, 1990)

Beany and Martha worked together yet did different things—with the same instruction, the same courses. Their goals were different, their interests diverse. Interesting!

Feeling overwhelmed with the amount and intensity of the weaving information, I hunted for a quiet corner to review my thoughts of what weaving is, for the speakers, and

for me. Not finding one, I stopped, mid-room, and in a reflective tone asked, "What is a weaver?" My neighbor responded, "It all depends on how you see weaving, I guess." We began to talk of different weavers and of different weavings for as it happened, we had been to listen to different speakers.

The conversation turned to talk of transparencies and willow baskets, both experiences of weaving that are more than the weaving itself. Talking together, we explored the depths of what a transparency is. Simply, it is a piece of loosely woven fabric, a web usually made of naturally-colored linen where the pattern (picture) yarns are woven into it, not laid on top, but are an integral part, an essence of the weaving. Such a "picture" is hung where daylight will shine on it and through it, as for example, a window valance. It creates an ethereal, translucent quality, a feeling of shifting figure and ground as the light changes. It is transparent, ephemeral by day and bold and clear at night when the light from the room reveals its picture and colors in an incandescent richness. As nightfall approaches, as the sky outside darkens, the transparency, its transparency, takes on a set of new dimensions, a dance of shadow and light as the changing light shines through the background, through its "back", and on its "front", and struggles through and into the picture itself. Simultaneously, some parts of the picture seem to take action, are light, moving dreamily. Those woven in varied and thicker densities become darker, shadowed, at play, while others, more stable, shift into solids, become colors again until after the dance the whole picture descends into incandescent stability once again. During the dance of light, more than two perspectives come together, the viewer is given more a sense of the picture than a straightforward view, a transparent, translucent, a not quite solid view of a picture woven into the cloth.

The sense, or essence of the weavers who spoke in this room, like the transparency, was reflected in, on, and out of the displays of their work, and in my feeling of being immersed in the weave of their stories. Seeing these old friends and students tell their stories added to the dimension of my knowing their weaving and their friendship,

texture. I was drawn to consider this community of weavers in new light—and the richness beyond what I had known.

By this time, we were all totally immersed in the weaving world and ready to savor the sense for a while. I noticed Martha had joined my colleagues at play with the lights of transparency. I teased her about saying she would rather weave than do Christmas. She said, "Well, it's true. My ideas of time have changed since I learned to weave. Christmas [preparation] takes too much time, time I would rather use to weave!" The others among us remembered how their lives had been changed by just such a singular thought. I remarked on how I usually warned my students that learning to weave could be addictive and how now I had a larger sense of what I had said.

One weaver talked about her experience of time.

> **We are weavers because we enjoy the physical act of weaving. We like the combination of control and freedom... the rhythm and harmony... We sometimes begrudge the time taken for preparation,... those tasks which must be completed in advance of going to the loom. Sometimes the planning is self-defeating. I once spent hours deciding on colors and pattern for a handspun blanket. I never began the spinning. I could not face the task of spinning the necessary thousand yards of yarn. Was this time wasted?... In this age of hurry and stress, had I wasted my precious commodity of time in planning a project which I never began? Of course not; I learned from the planning that I lacked perseverance for such a large task. (A few hours is a cheap price to pay for self-knowledge.) More importantly, over the past few years I have learned about a special quality of time that is bestowed on weavers and others keeping old crafts alive. From weaving we learn the patience of earlier craftsmen and -women.... Even a hundred years ago, weavers were recognized to have a special sense of time out-of-step with "normal" schedules. It is not necessary for me to emulate that weaver who... made a pair of pants in two**

> **days... Rather I now will pull out the old scrap of coverlet with its handspun cotton and wool and admire the patience of the weaver who took the time to create beauty in an object of daily use. I think of the Chilkat weavers taking six months to finish one dancing blanket.**
>
> **And when a friend asks for one of my specially patterned handspun caps to be made in a week's time, I only say I'll try. After all, we cannot tell those caught up in the throwaway society about patience and explain how handcrafts use a special sort of time. But if the friend has to wait two or three weeks for the cap, perhaps she will value it more than if it were hastily made or dried in the oven. I hope soon my sense of time will be enlarged enough that I can begin my handspun blanket. After all, I have finished the planning. (Martin, 1988, p. 91)**

That little story left us pondering the sense of time—time to plan, time to do, time to savor, and the time to become involved in what we do. More than I expressed the frustration of not enough time to take in everything at this conference, certainly not enough to absorb it or have time to think about it. All we were getting, for now, was a sense of the whole.

As I moved on to involve myself in the Commercial Displays, I knew I took with me more than the words and the weavings. I took a sense of the weavers, their weaving and their lives, woven with my sense of having shared, been part of the weaving, as I could have taken a woven willow basket made of, yet filled with, their weaving. I soon noticed that the weavers setting out their displays in the adjoining room, were some of those I had met and learned from, shared with in the past. They, too, were part of my weaving community, my handwoven basket.

Commercial Exhibits

Expecting to see booths set up for selling, it gave my convictions a jolt to see this "commercial" room set very much like the last with displays of weaving creating a setting in which weavers had positioned themselves on the benches of their work, to talk to us, the weavers and teachers. I noted only one weaver who took no time to talk. She was working at her loom, producing profusely, following the patterns, obviously committed to selling her work.

Others were more relaxed. I moved through the displays, thinking I would stop briefly at each one, but somehow I became involved with each as I came to it and couldn't schedule myself to take them all in.

Exhibit #1: Weaving to Wear — Anita

It was clear that the next weaver I watched was enjoying the social aspects of the conference, was renewing friendships and creating friends. She wore a most stunning outfit of felted, handwoven cloth that embodied, somehow, her enthusiasm for her work. She was telling those who were there to listen that she didn't sell her work directly. She taught classes and workshops, liked to share what she knew. Anita, I knew, could see clothing in her loom. I had heard her story, of the wedding-gift loom, the rounds of learning to weave, and her commitment to weave everything she wore. I paused to listen as Anita herself talked to us.

> **I am still staggered by how much the weaving and wearing of handwoven clothes has affected who I am, how I live and the priorities in my life. Little did I know that the loom my mother-in-law gave me as a wedding gift would change my life.... I have to admit I was not impressed with weaving... in fact, I was bored by the second placemat and did not have the faintest idea what that loom was doing. Being a good daughter-in-law, I played at weaving, but really spent my time as a Girl Scout volunteer and talking unsuspecting friends into taking classes with me**

on everything from pottery to silk-screening. I would hire an instructor from Seattle and finance the course with a group of local people!

[Later, when] I found myself at home caring for small children, with little time and still no money, but needing some challenge besides diapers. I decided, one dreary fall day, to find out what that loom did... unfolded it... and took odd amounts of jute and opened *Davidson* to page one. I put on a warp, wove a purse, and then put on a second warp. My bridge group (yes, I was playing bridge then), bought all twelve. I was in shock, for people had paid real money for something I had made. I dashed to Seattle and bought more yarn and turned to page two (of the same book). With great trepidation, I even submitted a few items to the local gallery for jurying. They were accepted and when these items sold, I could buy more materials and weave additional pieces.

This went on for some three years....: I would weave at nap time and late at night.... I taught myself and unwove more than I ever wove. I made every conceivable mistake, but I was learning and eventually I was selling in some ten different locations in the state.... I considered weaving my profession, never my hobby, right from the moment it became important in my life. I also learned that as I considered myself a professional, my family and friends began to view what I was doing from the same perspective. For years I have written in those spaces on forms that ask, occupation... "weaver"!

This reminded me of Penelope (Homer, 1963) who wove for her life, weaving by day and taking it out by night. She had promised to marry when she was finished her weaving. She obviously didn't want to marry! And the ruse lasted for three years.

The first national weavers' meeting, Convergence, was held in 1972 in Detroit, and I had saved enough money to attend... I was so nervous I couldn't eat

for days before departure, but that event was another turning point. First of all, I [managed... I found a sense of Me again, a sense that had been buried underneath all the labels of wife, mother, daughter]. I also, by chance, took [a] seminar on double-woven clothes and knew that I had found my focus in weaving. I was so excited I couldn't sleep that night and wrote in my notebook... "from this day forward, any major piece of clothing I wear, I will weave." I returned broke but in love with a loom I had seen at the conference. I applied for a booth at the local art festival, somehow wove night and day while tending three small children and earned enough to purchase the loom. People saw my work and wanted classes. I made up a course based on all the disasters that had befallen me trying to teach myself, talked those same friends into taking more courses, and thus began my adult education classes for the community college. I soon found that there was not time to teach, weave to sell and take care of my family, so I eliminated selling and focused my weaving time on developing clothing for my wardrobe. I made skirts that made me look ten months pregnant, coats that weighed 20 pounds, fabric that self-destructed when touched with scissors... I even have a dress that has glued seams which feel like coarse sandpaper. I knew there had to be a better way to create clothing and discovered that if I wove rectangles and squares, assembled them selvedge to selvedge, I didn't have to deal with the emotion and trauma of cutting into fabric. I had no idea then that I was traveling a well-worn historic route....

At a regional conference, because I was wearing my creations, someone asked if I taught people how to make "clothes like that." I confessed that I hadn't, but I was certainly willing to try to put a workshop together... [Now] I teach some 12 workshops a year in addition to sessions at national meetings and regional conferences.... My family is still my first priority, but I have learned that I have to centre who I am before I can adequately give to others.

The weaving has also given the bonus of traveling to other cultures.... I began to realize that the clothing shapes I was designing have been worn in other countries for hundreds of years and I wanted to research additional information. My first trip was to Greece.... I have traveled to Finland, Thailand, Mexico and China!...

All of this because of a loom, weaving, and the creation of clothing that said who and what I am" (Mayer, 1984, p. 1-7).

Anita used, still uses, the simplest of weaving patterns (plain weave like Beany still uses) but she could see that in those patterns and on the loom there were unlimited pieces of clothing. She saw possibility and committed herself to it. It changed her life. No two of her pieces are remotely similar; each is a work of art, dramatic and warm-feeling, named and revered (for example, Two-drink Dress, Sweetie Pie) with a history of development, out of the history of weaving clothing (for example, szur coat, Portugese Shepherd's coat). Her books and her workshops are a personal expression of her life as weaver and how weaving wove her life. For example, "Grey Sky Shirt was born in a yarn store,... practically wove itself.... It just flowed from within. The only problem was finding the right button and slacks. Even that was finally resolved. A weaving that was meant to be" (Mayer, 1984, p. 121). About Two-Drink Dress she says "I also learned how much clothing communicates.... I was visually saying something about who I was and that allowed those who responded to that message to come up to me and initiate a conversation. The dress has been to many events since that night.... I *always* have a grand time. It does too" (p. 129).

As I listened, I remembered the impact of Anita's philosophy on me as a weaver. She shocked me, and through her enthusiasm and her shared maxims about life that she

carried with her written on little cards, I came to believe as she does that "Everyone has a unique style waiting to be expressed" (Hansen in Mayer, 1984, p. 1). I began to think that I, too, could become a Weaver, maybe even make a "statement" about who I am! I tried to learn from her that I was important.

We all live under the same sky,
But we do not all share the same horizons
Always remember to use what talents you possess...
for the woods would be very silent
If the only birds that sang there
Were those that sang best.
Author unknown (Mayer, 1984, p. 150)

Anita encouraged me to continue making clothing for myself, pushed me to explore more about color, assured me that I had a flair for it. From meeting her through her workshop and book, I began to see weaving in a more philosophical light. Two other weavers who touched me through their work were here also, to talk about their weaving philosophies. Both had seemed too elegant to me. Virginia's table linens and Albertje's (like Anita's) clothing seemingly from a far distant world from mine.

Sensing someone near me, I glanced over to see who it was. Tawa had appeared and she struck a memory that I recalled aloud. We had traveled together to a major conference (Convergence) in Seattle where Tawa was registered in a mini-course that she wanted to take. I had registered in one that didn't interest me much so set out to explore the conference sessions in my own way. I floated from session to session, staying ten or fifteen minutes in each. This way I covered the whole conference in pieces, wasn't even asked to leave more than once. I learned much from my floating, I met many people, saw many things that interested me, some that didn't, and some that challenged my sense of what I could do. Just visiting, I was often asked to join in, and so became a small part of almost every workshop at the conference. Tawa learned from the course she enrolled in; I learned from them all.

It was there, through her welcome and her teaching that I first met Virginia. She spoke quietly now about how she came to be "a weaver".

Exhibit #2: Courting the Muse — Virginia

My love affair with fiber began when my children were very young, one not yet born. It filled a creative need for a young mother... Weaving gave me a tangible product that lasted and the extraordinary satisfaction of using and enjoying that article... It gave me a bit of control over my destiny. What power I exercised whenever my hands made contact with a shuttle. Never mind that I was a hobby weaver during children's nap time or evenings, or that I was producing functional rugs, draperies, and bed coverings. What I was really doing was mastering a skill, learning the basics of the complicated weaving process, building a foundation of knowledge. Never mind that I concentrated on technique or that I frequently used drafts from books. That was all I had time for, and it kept me from climbing the walls.

Several years later,... I could spend all day in the studio on Tuesdays. Now I can spend as much time as I need to follow through an idea and develop it through all its permutations, and I can do it when the Muse is on my side and ideas are flowing, at any time, day or night....

When you are doing what you truly enjoy, time should be of no concern. The weaver's work is the fabric. It is there forever, and a part of her life has become incorporated into its physical actuality. Time allows the subconscious to function, ideas to settle in, the inner reservoirs of the mind to refill, and the soul to be nourished. Call it daydreaming, if you wish. There is no question that creativity flourishes when time does not dictate when you should work. Einstein once admitted that he was not as brilliant as people credited. "It's just that I stay with the problem longer," he said.

I now recognize the subtle changes that occurred as I developed my craft, as I honed my skill. No more borrowing drafts, methodically reproducing them as

though they were recipes. Techniques had been mastered and had become second nature. Now I was free to go ahead and say what really mattered to me—to express foremost an idea, then to select the technique most appropriate...

Weaving is more than throwing a shuttle across the width of your loom every day, hour after hour. It is true that, when the body is comfortably centred at the loom and the physical movements have merged in consummate balletic rhythm, the situation is ripe for creativity... Then all is right with the world. Weaving is continuous decision-making, selection, discarding, study, diligence, stepping back to look at yourself and the work, correlation of composition, color, construction—all perfected with the mechanical processes of weaving. The process is the means, not the message.

Now I can go out on a limb. Now I can dare the risks of innovation. It takes courage to put yourself in a position to fail, but having failed and regrouped is the only way to feel secure about yourself... Be willing to experiment, to weave a prototype and then repeat and repeat until you reach a level of satisfaction you can live with. It is an endless quest that drives, compels, and never allows for smug self-complacency. Today's work is tomorrow's reject. Growth allows change. The self is a constantly altering sponge, absorbing influences, fascinated by change, emphasizing the different facets of its variety. Ideas emerge from the subconscious, but the subconscious must be fed. Search for truth. Search for the few moments of transcendance when the spirit rises about the self and becomes one with nature, when through some mysterious insight the artist is allowed to reveal the depth of his or her spiritual resources and is able to make a profoundly compassionate statement that is timeless and universal in meaning. Submerge yourself in your work—the work is the person, and through it you share and bare yourself.

> **If I could bequeath you a gift, it would be a week to do nothing but that which you enjoy the most; the chance to nourish your soul with an experience that puts you back in touch with your innermost, often secret, feelings. (West, 1988, pp. 55-56)**

It was consoling for me to hear these weavers speak of the deeper roots of weaving, beyond the production and selling that had hurt me so much. Seeing their weavings displayed reminded me of the pleasures of having time to experiment, to play with colors and fibers, to become involved. These "teachers" reminded me, too, of the pleasures of sharing through teaching and through those products that are true expressions of Self—those that I chose to weave, for me.

The experience of weaving clothing was wonderful for me and for the most part I liked what I made. Clothing, however, took on new dimension when I saw the dramatic creations Albertje made—wondrous movements in sensuous and shining fibers, art for the human form, unique and individualized expressions of color and fluidity. As she talked about her weaving, I could feel the passion of her creations for they reflected her love of weaving and its connection to Life. Albertje was here, like the rest, to share her weaving, not to sell it.

Exhibit #3: Celebrations of Life — Albertje

Her exhibit was another set of clothing, dramatic and sensual silk, light and moving. Albertje was talking about her clothing and her workshops:

> **"I don't see garments as just something to cover the body," she says. "A handwoven garment must speak of the individuality of the wearer, it should be a celebration of her form."... while her own style is based on a strong flair for the dramatic, her message to weavers everywhere is to find what's right for them. Emphasis is always on the positive—not "how to conceal this figure flaw," but**

"what asset shall I play up?" Workshop participants come away not only with a garment they love, but with a new sense of self-image, an upbeat approach to designing and weaving. It's all summed up in these excerpts from her personal statement:

> *Celebrations of Life*
> I did not choose fibers, fibers chose me.
>
> Maybe we were already connected in a previous life... ?
> My life and my work are closely related. Warps, strands of life...
> Weft, the stories we weave into the warp, the stories of our lives.
> Slowly the picture begins to unfold; every row of weft adding a little more to life's story.
> Changes and constants.
> We can change the color of the weft, add some texture, change the whole design if we so desire, just as we can make changes in our lives.
> But the warp remains constant.
> Its threads keep running through the entire piece, connecting past with present and the future.
>
> Strands of fiber, strands of life, woven together into an integrated piece, a fabric of life.
>
> These fabrics are my stories; cries of pain and songs of joy and hope.
> *My* life, *my* song.
> I am alive!
> I am part of this world and I am myself.
> I can step out of this world and step into the world of dreams and imagination.
> That is where I create—Celebrations of Life.
>
> I give my song to others and it continues when people wear the fabric I have woven.
> There is a transformation; the fibers come alive.
> The fabric moves with the body, color changes, another human spirit is added and a new design, a new song is born.
> *Albertje* (Koopman, 1983, p. 59)

I asked Albertje about a recent article in *Handwoven* (LaLena, 1986) that indicated her lifestyle and weaving had changed. Her frustration and withdrawal from weaving seemed to parallel my experience. She answered that yes, because of time-costs, weaving now took a less important role in her creations, but she was still creating one-of-a-kind pieces of clothing. "For some reason, I could not do multiples with weaving; there is a too-personal connection between me and that work.... I finally sold most of the looms with the warps still on them. I have sent yarns to Sante Fe where I will be this winter, and I will

have access to a loom there; I'll be curious to see if I will weave there. I think I will" (p. 90).

We stood, the group around Albertje, silent for a time, touched by her revelations, thoughtful of our own transformations, awed by the spirituality expressed so eloquently. Then we all started talking at once. We felt the need to share what we had just experienced with each other, though each of our experiences was different. For example, there were two displays that I had not yet seen, and as I listened to the others talk of them, I resolved to find time to see them sometime during the conference. A young man spoke enthusiastically about the lifetime of weaving and the looms that Everett (Gilmore, 1986) had built, and of the difficulties he faced in actually inventing the loom that is most common in our Western world today. As one teacher spoke of another weaver's work, her eyes were starry and sparkling. We could picture the wonders of textured tapestries woven with complex diagonal stripes in the skies and wonderful poppies that seemed to step right out of the cloth along the bottom. I was intrigued to know how that was done with tapestry that is traditionally very flat texturally. Then she mentioned that the weaver was Joanne (Hall, 1982) and I connected the technique to the weaver, my Montana teacher of long ago.

These weavers were/are impelled to share weaving through the process, the product, and the workshops they teach. Their total involvement in weaving, how weaving represents their dreams, ambitions, and commitments is the message they seem to exude. Texture of their weaving lives showed in their weaving choices and perspectives, affected, became their view of life.

After dinner, and following a behind-the-scenes scurrying, we were treated to the visual smorgasbord of handwoven clothing in exciting dimensions of color and varied design, garments of every "hue and holler".

Fashion Show

Each weaver in the conference had been invited to model his/her handwoven garments or fashion accessories. File cards had been filled out so the announcer could tell us about each creation as it was being modelled. There was a wonderful array of most unique articles. The young lady who had woven a blue coat more elegant than mine walked, with the others, around the room and across the stage. I was proud of my small contribution to her creation and felt part of her community. Others weavers I knew brought out the same sentiment when they modelled their clothing because I often recognized a particular conversation about yarns, patterns, or cloth construction revealed in the actual garment. For example, Martha wore the stole-like garment we had made in the last Sheep-to-Shawl contest, and another wore a white sweater-coat with the "feather" diagonals we had talked about a few meetings ago. I remembered talking to the wife who had sewn the handwoven cloth her husband had woven and now proudly displayed as a plaid suit jacket. One garment, however, stole the show. A long-time weaver danced more than walked, as she wore what looked like a wonderfully rich green-gold plaid cape draped around her. Our suspicions were confirmed (for we knew the weaver) when the announcer told us that the garment she wore was indeed a tablecloth she had carefully woven. She had wanted to join in the fashion parade, and did, in her own unique way. She "brought down the house."

Still smiling, as the lights dimmed and the applause lost its momentum, we settled in to relax and enjoy the two movies: representatives of the wistful land of weaving dreams that eventually draw those of us who love to weave.

Movie #1: Living in a Dream

Lights dimmed and exotic strains of Eastern music broke into the silence. Credits showed that this movie was adapted from a folktale entitled, *Weaving a Dream* (Heyer, 1986). It began in a bare-looking peasant's cottage in the far East, a picture both humble

and plain. A weaver was hunched over an upright loom set directly in front of an only small window. As she wove, the weaver kept looking out the window, far into the horizon, then wearily moved back to involve herself in her work. A narrator wove the story:

Long ago, in a land far to the east, there lived an old widow who had three sons. The eldest was Leme, the second was Letuie, and the youngest was Leje. They lived in a small cottage in a mist-filled valley at the foot of a high mountain.

Everyone for hundreds of miles around knew the old widow, for she had a special gift. She could weave beautiful brocades that seemed to come alive under her fingers. The flowers, plants, birds, and animals she wove almost moved with the breeze. Her weaving was in constant demand at the marketplace in the village nearby. It was used to make dresses and jackets, curtains and coverlets. With the money she earned, the old widow supported her family, although the boys helped by chopping wood and selling it.

One day, while she was at the market selling some new weavings, she saw a most wondrous painting hanging in a stall nearby. It showed a large palace surrounded by beautiful flower gardens. There were vegetable gardens, too, fruit trees, pastures where cattle grazed, lovely birds, and even a fish pond. A river ran in front of the palace, and the whole painting was warmed by a great red sun. Everything she had always dreamed of was in the painting. She gazed at every detail, and her heart filled with happiness.

Although she knew she should not, she traded her brocades for the painting. I should be buying rice for my sons, she thought, but she could not help herself.

Three times on the way home she stopped to unroll the painting and gaze at it. "If only we could live in that palace," she whispered to herself.

When she got home she showed the painting to her sons and told them of her dream.

"It's lovely, Mother," said Leme and Letuie. "But where is the rice you went to buy?" They didn't understand her desire to live in the picture palace.

"It's a silly dream, Old Mother," they said.

She turned to Leje, her youngest son, with a sadness in her eyes he had never seen before.

"Leje, I know that *you* will understand. I feel I must live in this lovely place or I will die," she sighed.

"Don't be sad, Mother. I will think of something."

As he comforted her an idea came to him. "Why don't you do a weaving of the painting? Your weavings are so lifelike that, as you work on it every day, it will be almost like living there."

"You are right, Leje," she said with a smile. "It is the closest I will ever come to this lovely place."

She set to work by candlelight that very evening.

Once she started weaving she didn't stop. For days and months she worked, her shuttle flashing through the threads.

Leme and Letuie became very upset with their mother. One evening they even pulled her hands away from the loom.

"You are no longer making brocades to sell, Old Mother. Now we must all live on the money we make chopping wood, and we are tired of working so hard."

Leje ran to stop them.

"Let Mother be. She must weave the beautiful palace, or die of grief. I will chop all the wood."

From then on, Leje chopped day and night, cutting wood to sell for food. The old widow continued to weave every hour, on and on, never stopping. At

night she worked by candlelight. The smoke burned her eyes and made them red and sore, but she didn't stop. After one year, tears began to drop from her eyes onto the threads, and they became part of the river and fish pond she was weaving. After two years, blood dripped from her eyes onto her hand. Down her hand onto the shuttle it ran, and the drops of blood were woven into the splendid red sun and glowing flowers.

On and on she worked. At last, during the third year, she was finished. What a beautiful brocade it was, the most magnificent ever seen. Mother and sons stared at it in wonder. Even Leme and Letuie couldn't take their eyes from it. The garden, the flowers, the beautiful palace, songbirds of every kind, luscious fruits and vegetables ready to pick, all in the most perfect detail. Behind the palace were pastures for the fat sheep and cattle, and fields of maize and rice. The river sparkled in front, and the marvelous sun warmed every thread.

"Oh, Mother, how proud we are of your wonderful work!" whispered her sons.

The old widow stretched her tired back and rubbed her bloodshot eyes. A smile creased her wrinkled cheeks and slowly grew into a joyous laugh.

Suddenly, a great wind blew the hut door open with a crash! It raced through the room, knocking everything over. Then taking the wondrous brocade with it, it blew out the window and up into the sky to the east.

They all ran after it, screaming and waving their arms, but the brocade was gone. Vanished! When the boys turned, they saw their mother lying unconscious on the doorstep.

They carried her inside and laid her on the bed. Slowly she opened her eyes.

"Please, Leme, my oldest son," she said. "Go east, follow the wind, and bring my brocade back to me. It means more to me than my life. (pp. 1-13)

[The oldest son, and then the second son set out to find the brocade. They met a fortune-teller who told them how to retrieve it but both brothers in turn blanched at the hardships the fortune-teller suggested. They each in turn took a box of gold instead and headed home with it. Each decided it would be better to spend the gold on himself and, instead of going home, headed toward the big city.

While the old widow was waiting for her sons to retrieve her brocade she grew thinner and thinner, and went blind from weeping. Finally she agreed that the youngest son could leave her and try to find the brothers and the brocade. When he reached the fortune-teller and heard of the hardships he needed to endure, his face "didn't grow pale as his brothers' had", and when she offered him the gold that his brothers had accepted, he refused it."

"'I must bring back the brocade for my mother or she will surely die,' he said" (p. 19).

Leje knocked out his teeth and fed them to the stone horse who then carried him on his journey. He endured Flame Mountain and the Sea of Ice and came to the beautiful Sun Mountain. He flew past strange looking guards into the lovely palace and found "a great hall filled with beautiful fairies, all weaving as fast as they could. In the very centre of the hall, for them to copy, hung his mother's brocade." Leje assured the fairies that all he wanted was to carry home the brocade. He allowed them one more night to finish their weaving, then later in the night, he changed his mind and carried off the brocade, returned to the fortune-teller, received his teeth back, and hurried home to his mother whose heart was beating its last. He spread the brocade over her and her life (and eyesight) returned. They took the brocade outside and spread it on the ground. "Suddenly a soft, sweet-smelling breeze swept through the valley. It gently drew the brocade off the ground and spread it over the yard... [and] the shabby hut disappeared, and in its place the brocade itself took on the very shape and form of the beautiful

palace. Before their eyes the brocade was coming to life. The gardens, the fruit trees, the pasture—all became real." The old widow invited her neighbors to live with them, welcomed everyone including a red fairy who had woven herself into the brocade back on Sun Mountain.]

One day as Leje, the fairy, and his mother sat in the garden,... two beggars crept up and stared at them through the garden fence. They were Leme and Letuie. They had gone to the big city and lost all their gold, squandering it on themselves. Now they had nothing left. When they saw the happy scene before them, they thought of the terrible thing they had done. They were filled with grief and remorse, and they turned silently, picked up their begging sticks, and crept away. (p. 29)

The lights came on slowly and we stretched our taut muscles and gathered our senses—amid the eerie sensation that we had just been living a dream. As I walked out slowly, joined with the crowd, I mused about the intense richness of context as set by the weaver and her youngest son through their intense involvement in their "living dreams" while the richness promised by the text, the bag of gold, evaporated in the superficial and selfish view of life displayed by the older brothers. The quick rewards lacked what they sought. How did the message and medium intertwine?

That Leje was a listener, heard and felt the life of his mother points to the text being heard with a heart. That Leje lived out his intention, chose hard work and hardship in support of his mother's dream point to the way that one could become involved in the passion of life. Leje encouraged his mother, and joined into her dream. He was part of its context right from the start and of course, in the end, was rewarded from involvement in product and process. It is richness beyond our wildest dreams sometimes found when we are drawn to give passion, patience, and perseverance!

Movie #2: Weaving a Dream

Without enough time to submerge deeply into thoughts and feelings, we moved back into the theatre and right into the next movie. Its opening scene took us to the busy streets of a large city and the poverty-world of beggars, teeming with life, alongside the opulence of a Great Temple. This second movie was adapted from *Dream Weaver* (Yolen, 1978).

"A penny, a penny, kind sir," cried the Dream Weaver as she sat at the bottom steps of the Great Temple. Her busy fingers worked the small hand loom. "Just a penny for a woven dream."

The King of Beggars passed her by. He had no time for dream weaving. It was too gossamer, too fragile. He believed in only one dream, that which would fill his belly. He would not part with his penny for any other. Gathering his rags around him, a movement he considered his answer, he went on.

The Old Dream Weaver continued her wail. It was a chant, an obeisance she made to every passer-by. She did not see the King of Beggar's gesture for she was blind. Her sightless eyes stared only into the future, and she wove by the feel of the strands. (p. 9)

[The seeker who paid his/her penny to buy a dream received a story-dream that she wove across the strands.]

"Please, sir, for the coin, let me weave you a dream."

"We have no time for such mystic nonsense," the man began. Impatiently he looked up at the Great Temple and shook his head.

"It takes but a moment in the weaving, a moment in the telling, but it is beyond time for it will last forever," said the Dream Weaver.

The old man glanced at the sky, judging the time once more, and clicked his tongue. "Forever?" he said, and hesitated.

"A moment," said the Dream Weaver, counting his hesitations as consent. Her fingers scuttled over the warp, and this was the dream that she wove." (a story) (p. 22)...

"As the woman [who was with the impatient man] listened to the dream, her hand smoothed the sides of her dress with long strokes. At dream's end, she looked up at her husband and tried to reach his eyes with hers. A smile trembled uncertainly on her lips.

He looked for a moment down at her: then his eyes slid away from hers. "You can't mean you believe such childish tales? There is no man, no rock, no stone. There is no truth in it. It was a waste of time, and time is the only truth in this world that one can be sure of. Come, we are late." He held out his arm.

Hand upon arm, they walked up the steps toward the Great Temple and left the dream behind.

Hearing them go, the Dream Weaver shook her head. She finished off the dream and put [it] in the bag. The morning sun was warm on her face. She folded her hands before her and almost slept.

"I want a dream!" The voice was a man's, harsh and insistent. She had heard it many times before, but in her half-sleep his remembered footsteps had merged with the sounds of the day. "I have your money, old woman. Give me a good one."

"Just a penny," said the Dream Weaver, rousing herself.

"It is a five-penny piece," said the man. "For that I expect something special."

The Weaver sighed. The man came nearly every week with the same request. Five pennies for a one-penny dream. Yet he was never happy with the result. She pulled new threads from her basket and began....

"No," said the man harshly. "I do not like it. I can see already it is not the dream for me. I am no singer, no minstrel. I am a man of consequence."

"But you must wait until it is done," said the Dream Weaver. "Dreams are not finished until the very end. They change. They flow. They have undercurrents. Perhaps it is not a story about singing at all. How can you know?"

"I know enough," said the man. "I do not want to hear more."

The Dream Weaver felt the wool snarl under her fingers. She sighed.

"I would have given five pennies for a good dream," said the man. "But that is only the smallest part of a dream, and not a good dream at that." He threw a small coin at the Dream Weaver's feet.

"It is enough," said the old woman, finding the penny with her fingers. And then, to the man's back as his footsteps hurried away from her, she added, "Enough for me. But what is enough for you?" She finished off the fragment with knowing fingers and put it with the others in her pack. (p. 29-30)

[A widow and her child approached. The boy "turned in surprise to look up at his mother. 'You said all the dreams were dead. How can they be if this granny can make a new one? And just for a penny.'" (p. 32). The widow bought a dream for her child and was spurred by it to seek aid from her in-laws.]

Three young sisters approached Dream Weaver and asked, "Dream Weaver, we have only one penny to spend. One for the three of us. Can you weave us one dream? To share?"

"Share a dream?" The old woman laughed. "It is the best way. Of course you can share." ...

The Dream Weaver smiled again as she pulled the threads from her basket.

"Well, we shall see, little ones. A cat and true love and a laugh. I have had stranger demands. But one never knows about a dream until it is done. Still, I will try. And since it is your dream, you each must try as well."

"Try?" the three exclaimed as one. And the youngest added, "How shall we try, granny?"

"Hold hands, and I shall weave. And as I weave, you must believe."

"Oh, we will," said the youngest breathlessly. The other two laughed at her, but they held hands. The warp was strung. The weaver began" (p. 42)...

A young couple just pledged to be married bought a dream and at its end, the boy directed his words to the Dream Weaver. "The story was fine. Just meant for us."

"Story?" the old woman said as she finished off the piece and held it out to him. "That was not just a story—but a woven dream. Here, take it. For your new life. Keep it safe."

The boy pushed her hand away gently. "We do not need to take that with us, Dream Weaver. We have it safe—here." He touched his hand to his chest.

The girl, realizing the Dream weaver could not see his gesture, added, "Here in our hearts."

As if to make up for his tactlessness, and because he had a gentle nature, the boy said, "Help us celebrate our good fortune, Dream Weaver." He dug into his pocket. "Here, I have one more coin. It is part of the marriage portion. We would have you weave yourself a tale."

The girl nodded, delighted with his words. "Yes, yes, please."

"Myself?" The old woman looked amazed. "All these years I have been on street corners, weaving dreams for a penny. Yet no one has ever suggested such a thing before. Weave for myself?"

"Were you never tempted to do one anyway?" It was the girl.

"Tempted?" The Dream Weaver put her head to one side, considering the question. "If I had been sighted, I might have been tempted. But the eye and ear

are different listeners. So there was no need to weave a dream for myself. Besides...," and she gave a short laugh. "Besides, it would have brought no coin."

They laughed with her. The boy took the Dream Weaver's hand and placed the coin gently in it, closing her fingers around the penny. "Here is the coin, then, for your own dream."

The Dream Weaver smiled a great smile that split her brown face in unequal halves. "You two watch closely for me, then. Be my eyes for the weaving. I shall hear the tale on my own" (p. 70-71) [and she wove a tale for herself.]

"Ah," signed the Dream Weaver when the tale was done. It was a great relief to her to have it over, both the weaving and the telling. She dropped her hands to her sides and thought about the artist of the tale and how he alone really knew when his great work was done, and how he had put his own heart and soul into it. For what was art, she thought, but the heart and soul made visible.

"I thank you, my young friends," she said to the boy and girl as they waited, hand upon hand, until she was through. "And now I can go home and sleep."

She finished the piece of weaving and held it up to them. "Will you take this one with you?" she asked.

"But it was your dream," said the boy hesitantly.

The girl was more honest still. "There is nothing on it, Dream Weaver. On that—or on the other."

"Nothing? What do you mean—nothing?" Her voice trembled.

"A jumble of threads," said the girl. "Tightly woven, true, but with no picture or pattern."

"No picture? Nothing visible? Was there *never* a picture?" asked the old woman, her voice low.

"While you told the tale," said the boy, "there were pictures aplenty in my head and in my heart."

"And on the cloth?"

"I do not really know," admitted the girl. "For your voice spun the tale so well, I scarcely knew anything more."

"Ah," said the Dream Weaver. She was silent for a moment and then said, more to herself than to the two, "So that is why no one takes their dreams."

"We will take your weaving if it would please you," said the boy.

The Dream Weaver put away her loom and threads. "It does not matter," she said. "I see that now. Memory is the daughter of the ear and the eye. I know you will take the dream with you, in your memory, and it will last long past the weaving."

They helped her strap the baskets to her back. "Long past," they assured her. Then they watched as the Dream Weaver threaded her way down the crooked streets to her home. (p. 79-80)

The lights were still dim, became slightly brighter as the voice of Carole King sang softly, filling the room. We listened with our hearts.

My life has been a tapestry of rich and royal hue
An everlasting vision of the everchanging view
A wondrous woven magic in bits of blue and gold
A tapestry to feel and see, impossible to hold.

Once amid the soft silver sadness in the sky
There came a man of fortune, a drifter passing by.
He wore a torn and tattered cloth around his leathered hide
And a coat of many colors, yellow-green on either side.

He moved with some uncertainty, as if he didn't know
Just what he was there for, or where he ought to go.
Once he reached for something golden hanging from a tree
And his hand came down empty.

Soon within my tapestry along the rutted road
He sat down on a river rock and turned into a toad.
It seemed that he had fallen into someone's wicked spell
And I wept to see him suffer, though I didn't know him well.

As I watched in sorrow, there suddenly appeared
A figure, gray and ghostly beneath a flowing beard.

In times of deepest darkness, I've seen him dressed in black
Now my tapestry's unravelling: He's come to take me back
He's come to take me back. (King, 1971)

We all sat for several moments, the room strangely silent. We seemed to have all been touched, mesmerized by the movies and the final thoughts of how the tapestry of life is woven by each of us, and ultimately ends in its unravelling. Cycles of life and... All of us... Weaving our lives.

As the lights gradually brightened, we were drawn back to our immediate surroundings but I, for one, was not interested in conversation. I needed time to reflect, to think of the immensity of weaving, dreaming, living, and life. The same intensity was widespread, for the halls remained in suspenseful quiet. Then, like the others, I dragged my awareness back into the room.

With the evening still young, we set off to the coffee shop to review today's happenings and anticipate those of tomorrow. I listened, mostly, as each teacher gave impressions of what weaving was becoming for them, and as each weaver talked about the meaning of weaving in his/her context. The weavers here had seen weaving as life, their life, to be sure. Joan's world became encompassed and bounded by weaving, has only recently expanded a bit beyond it. Tawa would not even see herself as a weaver, but a grower of cloth while Beany sees weaving as practical art. Martha pointed to being experienced as requisite for a weaver while Virginia was content with being a hobby weaver. For Anita and Albertje weaving was an expression of Self while the movies showed weaving as life-threatening and life-giving. By this time in the conference, weaving had taken on a significant meaning for each of us. Even those who weren't weavers before were beginning to express themselves in weaving terms, to think of themselves as a weaver in small and significant ways. I heard weaving words bandied around in the context of our social get-together where previously so many of the words were curriculum, teaching words that held meaning for only the teachers among us. Now

we had shared, and were sharing, a weaving world where we could all become participants.

Day 3

We met again over breakfast coffee and reviewed the last part of the program, deciding what we would each take in and that it was not possible, again, to do it all. Having spent the day before immersed in weaving, the entries/presentations for this day promised a different milieux—to bring us back to thoughts of curriculum-as-lived. We chose with difficulty; they all looked so interesting.

Session #1: The Classroom in Town — Caroline

For starters, I chose what promised to be a short musical presentation. The third-grade students were dressed like "pilgrim" settlers and between the musical numbers each talked of their particular "family's" role in the history of their town. Their teacher introduced the musical by talking about how their project came about.

> **"I was lucky. My first year of teaching was saved by three wonderful circumstances. First, I was far too busy keeping my head above water to learn how to get to the nearest zoo. Second,... the town in which our classroom was located dated back to the early 1640s. Finally, I was new and possessed both blind faith and an untempered reserve of courage. Mixed in somewhere was a healthy distaste for last-gasp field trips saved till June.**
>
> **But where to begin? I looked around for raw resources—anything that might free my students and me from the schedule my own teachers had always seemed to hold so dear. Knowing nothing specifically of local history but convinced that, since we all lived in a small New England town, we must be sitting right in the middle of something, I was off and running. In my pocket, I always**

kept a supply of file cards to scribble down any excuse I could think of for a class expedition.

I also searched for engaging questions and tales of everyday life. Together they served as a catalyst for our activities and provided a common thread to help lead us from one exploration to the next. My role, then, was as class storyteller, researching and collecting memorable quips and bits of knowledge, combining them into a yearlong, real-life narrative told in installments each noon as 25 of us sat in a circle. From the first day, each of my 3d grade students adopted the family name of an original settler and thereafter assumed those settlers' names and historical roles in everything we did.

I used mornings for subject areas that required the classroom setting. I needed that time, too, to ensure myself solid standing in the eyes of parents who looked for 3d grade seatwork each day in their children's bookbags and who might not understand the value of our expeditions until later in the year. Afternoons, though, were reserved for going out into the field to poke around backyards, crawl into cellar holes, pore over gravestones, or discover hideouts for the Underground Railroad. Very quickly it became precious time to all of us, and we guarded that time zealously.

In due course, we reenacted our way in and out of a full-day sabbath (Sunday) in the oldest meetinghouse, a kidnapping by Indians near the town whipping post, six town meetings in original taverns and inns, a roof fire, the rules of colonial etiquette from school desk to dinner table, a day in the haunted Loring homestead, ciphering on slates under the tutelage of "Old Put," and, among other things, a trial from the actual court records of Sarah Carrier's witchcraft indictment.

When we couldn't get to real locations, we worked on constructing our own original one-room "town founders' house" (located at one end of the classroom) or

practiced scenes that eventually became "Starting from Scratch," a full-length musical relating the town's earliest history. [Here, then, the students in attendance presented excerpts of their musical.] We also spent a substantial amount of time writing settler diaries, field notes, notices for the meetinghouse, town records, sermons, poems, trip lists, hymns, project progress reports, hypotheses, and conclusions. And we drew maps and charts, costumes and scenery, fences and rooftops.

By the end of the year, 7th graders and high school seniors, required to pass a course covering the town's history, came to learn from us. The 3d graders led them on several explorations, but one of the most memorable was architectural. "See that roof and see how it has more on it than that one?" Courtney began. "Why do you think they did that—the extra, I mean?" Pitched roof led to saltbox and saltbox to hip, then on to gambrel, and eventually mansard. Each roof had a reason for being, explained Courtney and several other voices around her. So did each floor plan, each chimney shape and placement, each fence type, each gravestone and the symbolic art on it. As eight-year-olds ran down three-hundred-year-old roads to point out their discoveries, learning that had once been tentative took the form of a much more confident "Don't you see?" Each of our original questions, posed as catalysts for afternoon expeditions, had come full circle as students helped others join in their process.

All along the way, whether on a shared exploration, through settler diaries, or in their class musical, each colonist was always sure to point out his or her family's role in each episode. Rather than learning about history, they became that history, and all made sure they wouldn't be forgotten. Most of all, our afternoons were alive with that wonderful excitement that comes from personally digging in and doing. There clearly wasn't enough space in the classroom as we explored,

discovered, verified, and authenticated three hundred years of the human adventure.

We had but one problem. In all the pages of the neatly typed, carefully bound, district-required social studies curriculum, never once was there mention of any of this.

For accountability's sake, I kept an ongoing checklist. Early in the year, for instance, as we sat on our knees interpreting the original house-lot plan for the town, students began to get a sense of North, South, East, and West.... I soon knew I could mark of "Map Skills" with confidence. The checklist, now tucked in the back of my file box, was a reference point for studies that naturally unfolded around us.

When Krissy asked why so many of the lots were on a hill, but some definitely weren't, we had ample reason to cover "Economic Principles," "Community," and eventually "Government." Later in the year we explored a family's chimney with seats built on the inside of each wall and on one outing Jamie found one of "his" family gravestones bearing news that he had "departed this life... being melted to death by extreme heat." Even "Climate" fell into place.

It would have been easy to become swept up in our growing enthusiasm. So, from time to time, I went back to that original checklist, reviewing its contents, and reassessing how the district would say we were doing. My own goal was fairly simple: to substantiate clearly each of our field studies—to "toe the line," as the settlers would say—while taking time to dance along it, too.

Unravelling the town's history, then, became the common vehicle for covering many skill and subject areas. It was also a wonderful excuse to put students in the position of discoverers, gatherers, and inquirers. (Donnan, 1988)

I paused briefly, stood slowly, pondered the choices this teacher had made. The students were clearly enmeshed in their history. What better way could there be to learn it? How could "curriculum" become "history" in this new sense? How could history become "language arts", or "science", or "spelling", for that matter? How could I use these ideas for curriculum-as-lived?

Session #2: Revolving Doors — Julie and Meg

As I moved out into the hallway to go to the next session, a friend was coming out of a room where there was a large ruckus happening in its far corner. I was drawn in. A huge mountain of used styrofoam cups had just come tumbling down. The cups were rolling around on the floor and students were milling about amongst them creating what seemed like more and more chaos. Presently, the students began to organize themselves and their leaders began to talk loudly above the chaos, to each other.

How did it all begin? How did our two-week letter-writing unit become a year-long save-the-environment crusade? When did it become a kid-owned project that was self-sustaining? [They turned to us.] We have asked ourselves these questions, and we are still trying to piece everything together.

When outsiders hear about the huge project we tackled this year, they probably think we had it planned out every step of the way. Wrong! We had planned *part* of it, but mostly we remained open to new directions in which the project kept taking us. Like a snowball rolling down a mountain, it kept gatherings size, power, and momentum. Sometimes now we look at each other with a shrug and think, "All we really did was to introduce an idea and give it a little nudge." How and when did it change? And just who had control of this snowball, anyway?

It has been an unbelievable learning experience for us, Julie and Meg (two unsuspecting fourth grade teachers), and our classes, and we would like to share it with you.

First, we really have to describe just how we work together, because that might be part of how it all started. We share everything: the good, the bad, and the crazy. A lot of sharing takes place during our regular Thursday joint-planning session, but we also share thoughts and tales at recess, over lunch, or during any other moments we can grab during the day.

Putting our heads together helps us generate new ideas that we wouldn't have thought of alone. Knowing that we can count on each other's strengths makes us feel a little more clever and daring when it comes to trying new things in the classroom. Indeed, our motto is: "Two heads are better than *none* !" Keeping that in mind, let's begin the story.

As far as we can figure, the beginning was last summer. Remember the hot, dry summer when we were all miserable and could hardly breathe? The news media kept sending us the message that because civilization had made some major ecological mistakes on this planet, we were doomed to suffer the consequences. A there's-no-hope-so-why-do-anything attitude was everywhere.

By August, when she began pricing real estate in the Yukon Territory, Julie was very cranky and even desperate about the environmental situation. It just happened that she bumped into Tom O'Grady on the downtown streets of Athens, Ohio. If you are from this area, you know Tom is THE environmental expert of Athens county and probably of the whole state of Ohio. So Julie took the opportunity to ask, "Tom, tell me the real story. Are we doomed? Is it really too late to do anything?"

Tom replied, "It's not too late unless we believe it is too late."

"Ahhh!" A ray of hope broke in, or should we say ~~a cool~~ breeze of relief blew over this hot and nasty scene. "Hmmm.... This might be something interesting to share with Meg and our kids at school," Julie thought.

Later, that month, sweat pouring off our brows, we were trying to organize our classrooms. Meggie was searching for ways to use the 20 cardboard boxes her mother had unloaded on her. Then she had a brainstorm: use the containers to sort classroom waste paper for recycling! We had both been recycling at home, but we had not thought of recycling at school. Meg shared her idea with Julie, who immediately copied it.

Our classes began recycling paper during that first week of school. Then, as we were brainstorming classroom careers for the year, a new job emerged: recycling and litter control officer. Several children were hired to monitor the recycling bins, police the floors, and inspect the trash cans to make sure every scrap of paper was recycled. The new officers took their jobs seriously, and they soon were even discussing fines for litter and recycling violations.

Since the fourth graders had lots of enthusiasm, but not much information, we asked Tom O'Grady (Remember the man on the street?) to share his impressive slide show with our classes.... [During the discussion following his presentation Misty gave an incorrect answer, a styrofoam cup was nearby, and Tom began a litany on plastic foam.] Had all of these things not happened... we may never have taken the direction we did.

The next Monday we had follow-up sessions to review what we had learned from Tom's slide show. Could we somehow make a difference in this world? We wanted to get involved in a project, so we recorded our suggestions in a web. No matter where we started we ended up with styrofoam. The kids were incensed that nothing was being done about it and felt their futures were at stake. It gave us a focus and channelled their interest. Now, what were we supposed to do with it all?

An idea surfaced: October was "Clean up Ohio Month" and "National Letter Writing Month," could we incorporate these themes with styrofoam? (Oops, almost forgot to get out the graded courses of study.) Let's try again... Could we

incorporate these with styrofoam *and* at the same time satisfy curriculum needs? Together, we began to organize a letter-writing unit using the writing process and styrofoam as content. That two-week unit ended up lasting all year!

The first step in our pre-writing stage was to find more information. During this phase the kids became the experts on the pros and cons of styrofoam use. Much to our surprise, [the students] were able to read and digest sophisticated and technical information that was well above fourth grade reading level.

In the beginning we could barely pronounce "chlorofluorocarbon"—let alone spell it! but the kids were motivated and appeared to eat it up. Since the students chose the topic and knew their teachers would be learning right along with them, some of the usual obstacles to learning seemed to disappear. There were no moans and groans over difficult concepts and vocabulary, no pencils dropping or places lost. We had a feeling of purpose.... We made recommendations to the world (well, at least Athens county)... fast food restaurants,... all classes and staff members at our school... [department stores and supermarkets] and even President Reagan.... Using our best public relations skills, we planned how to get people to read our letters and respond. Kids suggested writing neatly and decorating the letters and envelopes to get people to read them. We also decided to enclose a highlighted fact sheet to give readers more information. Then Julie's class came up with the idea of enclosing a self-addressed, stamped questionnaire to encourage more responses.... [We received responses, people listened and called to meet 'the experts', the local paper sent a reporter, students decided to see if they could get their names in print again, wrote letters to the editor, journalists contacted us, strangers started to call, write, and even drop by our classrooms to congratulate the students on their work, even the fast food restaurants responded.] With each new

development, the students wrote return letters of thanks, so there was on-going communication between the students and the public.

A lot of changes were happening right in the classroom, too. Students were enjoying the feeling that they were doing something incredibly important at school. They became more skilful problem-solvers and more confident decisionmakers who were learning how to collaborate for change (No apathetic citizens is this crowd.)

By the way, they also knew how to write a letter and address an envelope better than any other class we'd had (Language Arts Pupil Performance Objective V1, B. 2).

We cannot pinpoint when the kids started owning this project. In fact, it was more a process of teachers nudge a little, students act; students propose new directions, teachers act. At some point it became something important for teachers and students together...

Regardless of how the project began and sustained itself, we wouldn't have attempted even the two-week unit without the help and support we gave each other. We have found it is nice to have someone with whom to hold hands while jumping off the high dive. (Remember, two heads are better than none.) (Ash & Toomey, 1989)

Now I knew what the mountain of styrofoam cups was about. Together the students and teachers had built the layers and rounds of learning that made the mountain. The ownership, the fun of it, was what the students were showing as they purposely scattered the mountain, as they scattered the complacency of their county about styrofoam use.

I talked to the kids about styrofoam—where the cups had come from, what their plans were for continuing their campaign. It seems to have become a life-important, if not

life-long, project for those I talked to. I was impressed with the intensity of their commitment and with the extent of their knowledge, in what they considered "their field". It prodded my sense of what could become important when I thought of the impetus for this extensive study—a question answered incorrectly, a misconception, and more questions!

Cocktail Hour

I paused for a moment, then walked back into the central area to join the throng of teachers and weavers, speakers and students. The noise level was much higher than when we had met here before. There was much excitement, and certainly much sharing of perceptions, conceptions, and views of the conference sessions, and some controversy, if the tone of the room was any indication. I agreed with many who expressed it, that I needed more time to absorb what I had learned. I wanted to talk more to teachers about their curriculum. The weavers were open about theirs, and I was intrigued to know how the classroom teachers were now viewing theirs. Many people expressed that they had been so immersed in the weaving that it was difficult to bring their perceptions directly back to a classroom situation.

I heard, and asked questions when I didn't, about the sessions I missed. The evaluation session was touted as the most developed, for much work has been done in the area, much as major models based on underlying assumptions of the evaluators (House, 1978). The systems analysis approach of Rivlin (1971), the behavioral objectives (of Tyler proponents) and decision-making (Guba & Stufflebeam, 1970) models are being replaced by the "goal-free" (Consumer Report-like) approaches of Scriven (1973) and the educational connoisseurship work of Elliot Eisner (1985). The ideal of immersion in the context of a classroom situation for the purposes of evaluation, and the evaluation itself describing all aspects of the scene including physical and "felt" nuance and milieux is the

essence of Eisner's "art of evaluation". I was drawn into their talk of the case studies presented (Willis, 1978) and resolved to pursue educational evaluation someday!

Other sessions my colleagues talked about related to pedagogical promise of computers in education (for example, Mathinos & Woodward, 1988; Mehan, 1989). The discussion became animated when they pointed to the astounding implications of the interactive abilities of text on screen, making "text" and "textbook" take on new meaning. The vastness of this concept quite boggled my perception of what computing could be in education—another intrigue to follow, this one soon.

The other topics I missed were touched on in our conversations but Time, that prudent editor, did not allow more than a cursory glance at the systems and ecological approaches, at creativity, and at the manditory math curriculum. I was amused and challenged like the rest to hear that the math consultant had come dressed as a detective to illustrate his use of the guise in the context of problem-solving at the grade three level (Sawada, 1989).

The conversations did not end before the dinner call was made and most of us never got back to the commercial exhibits nor to the Looms Display. We were moving forward in our thinking, forward into the realms of curriculum-as-plan becoming curriculum- as-lived.

Student Presentations: Weaving in the Classroom

After dinner, we were treated to more presentations that included students and a simple summary of the work their teacher thought was lively, a curriculum that suited. This session, however, was run by the timer, twenty-minutes to talk, clearly not enough time for a full presentation, only space to give us a glimpse of their work. We listened intently, knowing the speakers would pack all their passion and enthusiasm into the short time slot. And, surprisingly, the facilitator managed to keep the sessions that short! Almost.

Nancie narrated the first group's presentation, more a play than a group presentation. Her students quickly lined up their chairs at the front, in a semblance of rows representing a classroom. They spend a few minutes arranging their room, hanging their own work, and exchanging books and comments, as they would before a class would be started. Then, Nancie took charge.

> **The Mini-lesson... [is] a brief meeting that begins the workshop where the whole class addresses an issue that's arisen in previous workshops or in pieces of students' writing... [or] procedural issues... In a mini-lesson on conferences I'll discuss helpful ways of responding, and role-play good and bad conferences with a couple of my kids. At first I lead the discussions, but as the year progresses students share their expertise, too. Mini-lessons generally last between five and ten minutes, just long enough to touch on some timely topic,... shar[e] personal knowledge of writing,... create a communal frame of reference.**
>
> **I begin by modeling my own writing... stories of personal experience... a story I can't write,... pretty mundane topics,... [and] a humorous story,... [then] give students a chance to think about, write down, and talk about ideas of their own....**
>
> **Writers' workshop is the heart of the writing class. The mini-lesson, status-of-the class check, and share meeting exist to support what happens here. Of a typical fifty-minute class period, writers' workshop consumes about two-thirds; during this chunk of time, within the structure of the workshop environment, writers are on their own, calling their own shots. [Students write draft after draft, saving everything] creating a history of [themselves] as a writer.... I sit down at an empty student desk... and start writing... expecting everyone to join me. And they do.**
>
> **For group share,... seven or eight minutes before the bell I ask my students to finish the sentence or conference in progress and assemble with their writing at**

> **the front of the classroom. There, we push desks back to make a clearing on the carpet... and sit in a circle on the floor.... Here I model ways of listening and responding to writers; here we confer together about conferring, about responses that help and do not help writers.**
>
> **Writers use group share for many reasons, most of which evolve as the year progresses—auditioning something new for the group's ears, sharing a technique that worked, trying out on an audience alternative ways of approaching a problem, hearing a range of perspectives on a piece in progress, following up on information introduced in mini-lessons. On most days a couple of students share their writing. Sometimes writers request group share. Sometimes I invite writers to bring something to the meeting—another kind of nudge... Two important general purposes of group share are... to bring closure to the workshop, and to find out what other writers in the workshop are up to. And right from day one I work especially hard to make the group share meeting a safe place. (Atwell, 1987 p. 77-86)**

The courage to change her teaching to match her personal experiences, growth, and needs as a writer helped develop this format that she claimed was an extension of her dining room table, now seen as the focal point of her own literacy, a way to bring the class together as a literate community, and an extension of the work of Graves (1983) and Calkins (1983), and her own introspection (Atwell, 1987).

To demonstrate the conferencing technique she had developed, she picked up a small chair and began to move about the room, setting the chair next to a student, asking, "How is it going?", leading the student to tell of their work, guiding, not correcting, not even looking at the paper on the desk.

Then, Nancie's students talked. They had brought their work to share with us. They showed their checklist of skills, talked of how important and difficult it was at first,

to use their own personal topics for writing, and how they had come now to be thinking of their writing throughout their entire week. One talked of how important the journals were that they wrote and shared with their classmates and their teachers. Then time was up—and I had so many questions…

I was excited about the apparent ease with which these students handled the complexities of writing instruction through simply writing *a lot*, and about what they knew and what interested them. I was already planning how I could adapt her/their ideas to the regular elementary subjects I had been hired to "teach". I was beginning to wonder anew how we could possibly be so presumptuous to think that we could "teach" anyone anything. I was renewing the idea that students must do their own learning and that we, as teachers, need to think of ourselves more as facilitators of that learning. Nancie had given me some ideas about how that could happen for me, in the classroom as teacher, and how it had happened for me in the community as student of weaving…

The next group of students re-arranged the chairs into smaller groups and a spokesperson from each group told of their work. The ideal they had set was to help each other through the learning and to present their work cooperatively, as they had learned to work in their own classroom. They talked out about what interested them, often not waiting until the previous speaker finished, often picking up their thread of conversation a few moments later. This was not a linear presentation! One started to talk enthusiastically about a series of games, teams, tournaments, and models they liked (Slavin, 1983). She was aided by comments interjected by those who supported the sometimes competitive aspects of games and by others who found competition, even group competition an unsatisfactory, lonely way to learn. Most seemed to think that the competition needed to take a back seat to involvement of everyone in all aspects of the work. They were all stopped short by a quiet voice, almost an aside, from a student who reminded them that they often learned when they had time to work alone and when time for quiet introspection allowed them to integrate and personalize the information. Only then the together-time for

discussion, face-to-face interaction, and group processing that happens in cooperative learning groups (Johnson, Johnson, Holubec, & Roy, 1984) was most useful. They clamored to agree that lengths of time and sustained effort were valuable in comprehending material deeply (rather than finishing when the blanks were filled). One student remembered a quotation that supported his preference for cooperative efforts: "The Japanese... view academic success as a matter of disciplined, enduring effort aimed at achieving *satori,* or the sudden flash of enlightenment that comes after long, intensive, but successful effort... more likely after a discussion in cooperative learning groups" (Johnson, Johnson, Holubec, & Roy, 1984, p. 16). Just as the time-limit-"gong" was sounding, one student talked of other kinds of groups in the school (Newman, 1974), other group strategies (Koopman, Hunt, & Cowan, 1978), and the need to consider "the school as a system of interacting parts, each affecting the others" (Goodlad, 1984, p. 31). Another tried to wrap-it-up by pointing out their group's emphasis on a diverse cooperative approach: "... weave [these] three goal structures together: setting up individual responsibility [with] (accountability to the group), peer teaching, competing as a light change of pace, and ending in a cooperative project. Thus, they do what schools should do—prepare students to interact effectively in cooperative, competitive, and individualistic structures" (Johnson, Johnson, Holubec, & Roy , 1984, p. 41). This lively group just did not want to stop!

The commentator interjected a comment of his own, remembering that one of the researchers at this conference had recently completed a "cooperative" book about how using projects which are "emergent and negotiated rather than totally preplanned" is a *holistic* way of organizing learning to complement and enhance spontaneous play and systematic learning (Katz & Chard, 1989, p. 5). "Children's minds should be engaged in ways that deepen their understanding of their own experiences and environment" (p. 4) for indeed, school is life. "School experiences are real, daily life experiences" (p. 6). The eager students were stilled momentarily as they were reminded that others needed time to

speak, and as they gathered themselves together to make room for the next group, it was evident that they had questions, more questions than answers now, as did I. We had come back to the connections between learning and living, learning and life.

But, the next set of students seemed just as eager as they began spreading themselves across the front of the room. Each spoke for just a few minutes. They showed pride and excitement as they told of their work. Two were from a rural high school where the local histories they gathered had become "Foxfire" magazine (Wigginton, 1986). Two others spoke of how their class made a movie, two more of the environment action tray liners they designed and distributed. A pair of students talked of how their "group of inner-city black students in Atlanta [is] documenting the oral histories of their grandparents" (1988, p. 2). Each talked of his/her personal involvement in their work, how it had evolved from the initial brainstorming and inventory (skills-required) sessions and how the project itself was reshaped through each seeming obstacle to its creation. Each talked particularly about the individual contribution s/he made—one's trials with fundraising, another's frustration with learning to use the equipment required, another's joy in meeting so many wonderful resource persons in the community. The teacher stressed the need that "each [project] engages the academic agenda in an immediate, real way; and each is a result of a process that teachers and students entered into together before the project was launched,... [a] decision to produce something... uniquely suited to and tailor-made for the students and the community your school serves,... and the final decision is not made by the teacher and imposed upon the students" (Wigginton, 1988, p.2).

These ideas seemed to be those I had known about weaving, reframed in the context of curriculum. From project to project, from weaving to weaving, being involved, making choices, learning skills, re-thinking the process, trying again,... yes, I had met these ideas before!

Just then, we were treated to the spectacle of a large number of students moving gracefully into and through our large room in what reminded me of an old fashioned quadrille or ribbon march. The students formed themselves into ever-changing groups in time with the music, and in fluid movement from one part of the room to the other, between and around the rest of us standing, quite captured by their movements. They seemed to have no leader, appeared to be saying with their harmonious movements and fluid re-groupings that they had both purpose and plan but with no fixed need to resist the natural movements that were evoked by the song/music and the obstacles presented by those of us who were spectators. I was drawn to join into the dance, noticed that other joined in as I did, and soon the whole room was an undulating mass of people moving in an everchanging pattern of music. Abruptly, the music stopped, a spokesman stepped into the centre and began to tell of his history class.

[I began my introductory social studies lesson by listing the units for study that I had prepared. I gave many options: a unit made of leading questions about modern Europe, some booklets about law, a story in the future, and so on. I suggested they could work in small groups or alone, focus in depth or cover a current events problem. I suggested they might choose a topic specific to them. As soon as I finished speaking, a student asked, "Why can't we all form groups of our own choosing and study the topic we want for as long as we want?"

Student response was overwhelming and immediate. They wanted to start right then. I expected their enthusiasm and dedication would last a month, but not for a whole semester. I approved their requests and watched the groups form and re-form.]

What happened in the days, weeks, and months that followed was one of the most exhilarating experiences of my teaching career. This is not to say that all went smoothly. After all, they learned—and real learning is seldom smooth.

It seems to me that one of the most important learnings—perhaps even more difficult than any of the content they pursued—was the actual process of forming groups. That process helped me grasp MacLuhan's phrase, "The medium is the message." The students were quite thoroughly "messaged" with group experience....

The process of groups evolving and disintegrating occurred continuously. However, during the first two weeks the process was more than a little disconcerting. Students soon began to deal more effectively with each other and provide support for one another's feelings. During the first month, I was asked to make critical decisions about group problems. Usually I asked the group to talk it out more carefully. In most cases the groups successfully worked the problems out.

Gradually the groups seemed to move toward demanding independence.... I observed this stage in many groups. My role had evolved to being a roving facilitator who moved among groups throughout the period.... I made it known that I would be available when they wanted me to be there. At first, requests were made only if there was trouble within the group or if members felt it was time for them to be evaluated.... Finally, a few groups reached a stage of requesting my participation as a group member. (Schubert, 1989, p. 27)

[Forming the groups was only one aspect of the evolving structure of learning this class developed. The topics themselves fluctuated and settled out just as the group process itself concurrently with the shifting currents of group change. At first the students remained largely within the parameters of the options the teacher initially presented. Some topics were "in vogue" for two or three weeks. Some groups periodically evolved which did not give in to the influence of what was in vogue. Some students changed topics or even groups every few days. Others found a topic that lasted nearly the entire semester. One boy needed help to

> **recognize that he did have a real wealth of social studies experiences, who then convinced his group to put on a series of skits based on his life experiences of racial problems. "The skits triggered one of the best sixth grade discussions I have ever heard" (p. 29). The creativity shown by the students astonished me, and led to community interest, interviews and questionnaires for the next-year's students.]**
>
> **Since children learn what they live, a facilitator of learning [the teacher] must often be a mutual learner. By showing me how I was needed as a mutual learner, as an exemplar of learning in its broadest sense, my students helped me learn how to de-school schooling. I thank them for doing this. (p. 30)**

Where the drum-roll came from I still don't know, but at this point the "motionless" students reformed their quadrille postures, and pulling clipboards from somewhere, marched right out among us, and began asking questions: interviewing us. What interesting chaos!

These students had shown me that the common complaint of schools about student lack of interest (Goodlad, 1984, p. 75) was not evident in this complex of student doings. They showed an obvious interest and involvement in their work!

They showed too, that when the recursive processes of living and doing are allowed, most interesting things happen. The teachers in charge trusted that the initial chaos would become more organized and more visibly productive as time allowed immersion and emerging cycles of work. The recursive workings of students, teachers, materials, and ideas were formed into rich, intense, and ongoing projects—a curriculum formed in the processes of living it!

Then, to my surprise, just as the each student had stationed themselves beside an interview candidate they were interrupted by the commentator who had previously

introduced himself simply as John. He began to talk about his own work, and when he mentioned his book, *A Place Called School,* I realized that this was the author, John Goodlad, speaking. He tried to sum up the student presentations with remarks from his own work.

> **After studying over 1000 schools and reviewing the results, he had concluded that a "good general education [which] is the best preparation for both [college and job entry requirements]" (Goodlad, 1984, p. 292) can be achieved by ensuring that all students experience a curriculum core and a limited array of electives (10%). "I would argue against a common set of topics constituting this core but for a common set of concepts, principles, skills, and ways of knowing" (p. 287). This would accommodate choice of subject matter, personal preference, remediation, and individual difference within economy of curricular offerings. "I would always choose fewer hours well used over more hours of engagement with sterile activities" (p. 283).**
>
> **He agreed with the students who advocated groups, but they suggested they be heterogeneous, multi-age groupings using, for example, "mastery learning which emphasizes a combination of large-group instruction and small-group peer tutoring. The class moves along together, with quizzes 'that don't count' being used to identify the need for more time and with the teacher and peers who have achieved the specified level of mastery working with those who have not until mastery has been achieved" (p. 297). Multi-ability groups showed in his research as beneficial to all members that worked together, because, "let me remind you that teaching another is one of the most effective ways to acquire mastery" (p. 297).**
>
> **The relentless monotony of telling, questioning, textbooks, and workbooks which we found to be so characteristic of classes from the fourth grade up must be in part replaced by activities calling for student involvement in planning and in the collaborative execution of plans.... Children should create their own economies,**

> based on sound economic principles; create their own plays, with due attention to the structure of drama; conduct mock courts, legislative sessions, and world peace organization. In the process, they read, write, compute, and deal with the problems of people, their environment, and the relationships among them.
>
> These activities accompany more conventional approaches to learning; they do not completely replace them. However, the "new" activities are not supplementary. They are where inquiry begins; more conventional activities grow out of them. Students read to gain knowledge and then bring it to bear on the problems being pursued. This is what we do in "real life." School should not be made "unreal." A major problem of schooling is the degree of unconnectedness it often has with reality beyond school, even while those in it are living out the only lives they know. The resulting incongruity makes much of school meaningless. (p. 335)
>
> Through these explorations, personal and vicarious, students should be acquiring "knowledge" through genuine inquiry. "Many students successfully go through the motions of rote learning, pass the requisite tests, and move on to more of the same in college. What they have had little of, however, are encounters that connect them with the major ideas and ways of knowing that the fields of knowledge represent. Too often, they were 'given' knowledge; they did not acquire it through genuine inquiry" (p. 337).
>
> If our schools are successful in involving the students in education that is part of the fabric of life, interweaving with politics, religion, economics, and family life, learning could then become a desirable condition of life!

I walked out, remembering the groups that formed and re-formed in the weaving community: the formal classes, the informal show-and-tells, the monthly or weekly get-togethers, the informal topic-oriented workshops, and the telephone calls to discuss

technique, ask for help, or share enthusiasms. Yet, I remembered, too, the importance of time-blocks in which to immerse myself in the feeling, being, and doing of weaving. Yes, and learning to weave was the common curriculum! It was *not* organized by age or grade, nor by prerequisite skills, grades completed or marks attained. Choice of quality materials and projects, meaningful experiences, and continuing involvement over time brought weaving into the core of the lives of each of the weavers. And I remembered how much I had learned when I set out to teach what I knew!

I expressed this to the weavers in the conversation group I joined in the hallway. Other such groups were forming, and re-forming as we moved to listen, and to express our views. After an hour or so, some of us drifted off, to leave the conference; others of us stayed on, intrigued and interested until exhaustion crept in and sent us on home, too. There had been times for personal and private introspection but as conferences are, most time was given to a variety of group interchanges and learning, stimulating, rich, and for me, intense.

We left the conference on the third day with this learning and background to each go our separate ways, to mull and re-work, to ponder the "problem", to integrate the ideas into the ground of our knowing, and to formulate our After Conference Reports that we would present to our respective school staffs, an attempt to put on paper the initial, and tentative reconceptualization of curriculum into curriculum-as-lived. It is evident from the immersion and the discussions that curriculum will continue to elude a precise definition, but had become more alive, more meaningful by being re-seen through weaving. This is a conference that will not be finished for there is no conclusive answer to the question, "What kind of curriculum would bring forth recursion in an educational community?"

The conference affected me intensely. It had become a very personal journey. I thought of the approach I intend to take with my weaving in this new cycle that will begun

with the arrival of the new 12-harness loom I ordered. When I was beginning to weave, I wanted to cover a wide range of topics, and had accumulated a wide range of yarns and books—which I sold. During the conference I was reminded that I had originally wanted to study color, that Anita and others had encouraged me. My experience with dyeing showed that I need to have the palette of colors before me to experience and experiment with. Now I think of the brilliant and accessible color range in cottons. I think of the projects I had wanted to do before: placemats and table mats from new rags and bright cottons, or using intricate designs and softer colors, weft-faced rugs with bright cottons. I think of my favorite gift projects: mercerized cotton scarves in lace weaves. Narrowing, focusing my vision of projects makes them seem more manageable and so I play with the sample colors, order the palette of cottons, a cone in each color, and await their arrival in full bloom. For teaching, this leads me to think of the maxim: "Less is better," and consider how the projects I am thinking of are so utilitarian, used in everyday experience, and how one set of colors (cottons) will become the structure, the base for them all. A curriculum would need to support the less-is-more, fewer requirements, thoughtfully-arrived-at base as a structure for the curriculum as lived, a warp to be woven. I wanted the loom and will find goals as the yarns and the loom arrived. It seems that the promise of learning is drawing me on again.

After Conference Report: Curriculum as Warp

As we had planned, Gary and I met to discuss our views of the conference and prepare our report to the teachers back home. He had, of course, visited different sessions, and he was not a weaver before he went, as I was. Our experience of the conference was infinitely personal, as is the experience of metaphor itself. We were affected in different ways, and it took some time, and many meetings, to re-work the ideas into something we could present together in a way that would give the teachers as rich a view of the

conference as we could give, and as we had been given. We worked together for many sessions, hoping that "two heads were better than none!"

The conference had immersed us in weaving and in curriculum, and had set out the questions around curriculum-as-plan and curriculum-as-lived. We looked for the threads, connections, then taking the threads we wove our presentation into a weaving.

We decided to invite the teachers to my weaving studio, set each of them at a loom already warped. The warp would become curriculum-as-plan, the cloth would represent the weaving. Through a series of warps, we would follow the threads to involvement, production, evaluation, and essence. Text and context from the conference became various threads of the warp and we talked of weaving the plan. Through the warp set as a plan, and the weaving a process of living that plan, the teacher and students were seen as dream weavers where texture and time (continuity and motivation), repetition and hard work, work done or left unfinished, and curriculum as transparency became the weaving of our conference experience shown to the teachers. Together we felt that the product we wanted to weave for the teachers was a sense of the need for lifelong learning as a purpose of education, with patience, persistence, and passion just part of the process.

To talk about warp, we needed to review openness and flexibility in setting a warp. We found the threads and put on a warp. A warp is preset, for the most part, remains constant but can be loosely structured, prepared for maximum flexibility, planned for one project or for many. The warp sets out intentionality (Searle, 1989), does not determine the end result. The warp is based on the plan for education, the overall objectives—but all of them cannot be accomplished in one curriculum—as all of my coats could not be woven on the warp of the blue coat, as my wallhanging was planned as a circle and square and became something richer—the allowance needs to be made for the user and plan to be working together, so the plan does not become set into a grain bag structure where the stripes have to be so, and the cloth so stiff that it causes the death of itself, the death of weaving.

A warp is held in tension, stretched between the beams of the loom, or the covers of the curriculum plan, as a recursive tension where the situation/warp is set and the weaver is drawn to do something with it. It is important to "set the warp so as to weave a complex pattern which appeal[s] to the imagination of the people" (Courtney, 1989, p. 285). At the planning stage it is impossible to know what the cloth will become. Colors, textures, fibers, and weaver interact as the cloth is woven. In the classroom, the students, teacher, materials—and the backgrounds, perturbations, and structures of each, interact as the curriculum grows, lives. Curriculum may be planned but it cannot be pre-set. Curriculum must be allowed to live as it becomes, as it intertwines, as it weaves itself into the daily, minute-ly interactions of students, teachers, materials, milieux, structures and backgrounds, setting new structures, new backgrounds, new milieux, new richness built on, woven on what is there, what happens, what becomes.

Gary and I had set out our intentionality, but how could we proceed with our presentation? We prepared a rough outline, a loosely woven transparency-for-plan that would allow the listening teachers to fill in the pattern, the picture with their own experience, their ground. We were not sure how our particular message would emerge, so we simply set forth with the story of our experience and waited for the discussion to bring out issues that were of particular importance to the teachers we were addressing.

We invited each teacher to sit at a warped loom in my studio. I introduced the weaving terms, then Gary and I carried on a loosely woven conversation with the teachers about what had touched us at the conference. We divided the one-hour presentation into several ten-minute blocks but encouraged discussion and questions throughout.

First, I asked the teachers to design a new project. With no background in weaving and not knowing technique choices, they found it difficult to create a satisfactory design. We talked a bit about motivation coming from the experiences of the weaver, and from involvement in the process. Some weavers were enamored with loom, some with product,

and others with process. Some wove to make a personal statement, some changed directions to rekindle interest. Many were motivated by compliments of family, friends, and recipients of their gifts. I quipped that perhaps we should think of another term for motivation. The only words that came to me, then, were interest, passion, and commitment. I remembered the commitment that all of the weavers had displayed, how hard they worked—long hours, with patience and perseverance—and how, in their stories, they had revealed a turning point where their interest became intense and commitment became dedication. The teachers-at-the-looms added their own experiences of becoming interested in, then committed to hobbies of their own. One mentioned that this had even happened for her career.

According to our plan, I introduced the weaving terms and allowed a few minutes for the teachers to study the warp and experiment with each technique I urged them to try before asking them to move to another technique or another loom. I talked about the warp and its integral role in the weaving product. I emphasized its structure and showed the weaving examples of my blue coat, my wallhanging, a transparency borrowed from Beany, and my grain bags. As I talked about each product, I mentioned the flexibility and openness of the different ones. Then I raised the question of which ones would lead to the most varied and rich products. Though the grain bags had their own beauty they could only become grain bags, utilitarian and blue-striped in a singular way. Transparencies, with their open warp structure could become all manner of things, including products other than transparencies, such as table runners, scarves, even rugs. Choice of pattern was equally wide. I showed examples of other linen-warp possibilities.

When I talked about transparency, I showed how one is made with a loosely woven structure and laid-in pattern threads. The teachers were eager to try each one. As we had planned, however, we allowed only a few minutes for each technique. There were grumblings that there was not enough time to really get involved in the weaving, certainly not enough to explore possibility. I took this as a cue to talk about the element of time that

had been drawn out so profoundly during the conference presentations and our own frustrations—quiet time, reflective time, busy time, cooperative time, essentially, much time—to become involved, so the project at hand becomes part of the students knowing and involvement, part of themselves.

Using weaving samples, examples, and products I had made and collected, I invited the teachers to touch, feel, and explore the textures of weaving, to take time with them. To supplement the sensory smorgasbord, I had also brought textures from nature: the bark of a tree, a moss-covered stone, small pebbles embedded in clay, all beautiful in their imperfection (Sawada & Young, 1989). I intended to create texture as a curiosity, a suspense, an intrigue, a mystique.

When the teachers returned to their looms, they were greeted with a neatly typed, carefully bound, glossy district-mandated curriculum that Gary had laid out atop the warps. As expected, the sensory contrast was sharp. I talked for a bit about the textures of weaving, how they are unique, irregular, interesting, deep, so much richer than the smooth regularity of worksheets, standardized tests, and textbook determined lessons. Gary talked about the textures of a classroom. A weaver lives his/her weaving; it is a natural extension of daily life, not divided into subjects to be taught, as our current curriculum often is. A student lives his/her life in the classroom. Time spent is time used in living, not time to prepare for some later time of life.

We talked about apparent smoothness—of the smooth-looking yarns or well-run classrooms. Textured product can be made with smooth-looking yarns. Classrooms can be rich, interesting, recursive, and busy, beyond the surface of a smooth-looking plan. Weaving, like learning can be hard work and fun, though it does not need to be the Disney-world so often expected by our Nintendo and Sesame Street kids. Teachers pulling a new rabbit out of the hat every day is not necessary. Sustained involvement is what works. The rewards become both external and intrinsic. The weavers learned to weave by weaving.

While texture was the topic, I urged the teachers to weave a bit, then asked if anyone had made what they thought was a mistake. Some had, of course. Others were simply unhappy with their product. So many presentations at the conference had touched the subject of mistakes, and I tried to recall the many examples. The essence, of course, was that all of the weavers (and students, and teachers) had let the mistakes become opportunities, had struggled to learn through them, or used them for changing direction. Through disasters they became determined to find a better way.

Students bring texture with them: their experience, their knowing, their enthusiasm and passion. The weaving should let it show.

From weaving with textured yarns, I urged the teachers to try a plain one, and plain weave. My own experience of plain weave, and the simplicity (austere, unadorned, plain, unfigured) inherent in some aspects of the conference were experiences I wanted the teachers to know. When they seemed to be comfortable with the rhythm and movement, the ease of plain weave, and had woven several inches, I asked about their sense of satisfaction in what they had just done. Several agreed that they liked it, found beauty in the movement, and in the simplicity. Others had still not relaxed, and were worried about errors. I pointed out that projects do not need to be complex. Plain weave has much scope and versatility. Some weavers spend their lives with it. Simplicity of design in transparencies and simplicity of pattern in rug weaves allows freedom of expression in color and texture. A plain long warp can be ready and waiting to be used or can be used to invent many patterns. A complex pattern threaded onto a loom limits choice, though has beauty in its own right.

Nor do the projects need to be complete in order for learning to happen. I pointed out to the teachers that they had now tried several techniques on a single warp, had learned without finishing any project as such.

We moved on to try other techniques and talked as we went about weaving and curriculum, how they connect with the lives of the weavers. We spent some time exploring

curriculum terms that could come out of the weaving metaphor. We thought of: product as becoming project, content becoming context, competition taking on more cooperation, mastery as mystery that would foster motivation, work that just might become fun and on-going, and the oft-boring exercises that could be transformed into experiences. We had a good time playing with these words as the teachers played with the warps on their looms. Then, through the questions asked, we explored areas of weaving and curriculum that interested the teachers.

Question: You talk of the lives of weavers. Who would be the weavers in a classroom?

Reply: At the conference, there was reference to "dream weavers", and in the case of weaving dreams, anyone could be the weaver but in the classroom, when the purposes of education involve learning for students, the students themselves would weave their own learning. This is happening whether we address it or not; recursion happens whether we name it or not. It would help, in my view, for teachers to see students as weavers, and offer them the tools and techniques to aid in their work.

Question: I have been to weaving exhibitions and shows. It seems to me that an important part of weaving would be mastery of the skills, and striving to make a better product, especially for those who enter juried shows.

Reply: Techniques are tools for learning; mastering them is important. Just as the craftsperson needs continually practice his/her skills, the students need to practice as well. Recursion, as a process of life, points to the attainment of mastery as but one level, ground for the next, as the weaver or student continues living. What teachers need to remember is that there needs to be time for the student to be immersed in the chaos and confusion of learning, time for him/her to retreat into contemplative space, and time to experiment, practice and re-group what s/he knows. Also, teaching the techniques may take only a few minutes, certainly not the usual lecture-length explanations we are wont to give. Give only

what is needed to start the process, and allow time to practice. Allow repetition. Allow the students to do their own weaving.

Question: That seems to bring us back to the question of time. Doesn't letting the students do the weaving for themselves, in their own time, take a lot of time?

Reply: Yes, of course it does. What that points us to as educators, is to look at the expectations of the curriculum in terms of what is basic, essential; what are the skills and knowledge that the students need to form the warp of their learning? We need not tell them everything there is to know. Indeed, we cannot. We need to trust that, given the tools they need, they will be able to weave their own, unique and valuable-to-them product. Their learning may never become a visible product, but immersion in the process points to living-as-learning while being involved in something that touches their lives allows students to make the process, the product, and the tools and techniques their own, part of themselves. It allows them to internalize and put them to use in their own lives. What we can give them through the process initiated, perhaps, in the classroom is perturbation, encouragement, support, and the tools to learn—maybe even the gift of a lifelong love of learning.

Time needs to be allowed for the weaver/student to become involved in the whole. Projects may change shape, be abandoned, or renewed through repetition and use, but disjointed parts are hard to put together. There needs to be a continuity that cannot be found in the separate pages of worksheets organized by some curriculum designer far from the realities and everydayness of the classroom. There is no wholeness or unity in the piecemeal approach of most classrooms today. There is no time allowed for immersion in the projects. Worksheets are often not related to anything in the child's life—as if the threads were more important than weaving itself. Continuity over time can be achieved by regular repetition of substantial pieces, by immersion over blocks of time, by more casual flexing of timelines, or all and sundry, numerous ways. Time allows the subconscious to function. We need just allow it.

All weavers took years to become Weavers. After 25 years, Tawa still does not consider herself Weaver. Projects were done, some completed, others left undone, or thrown out. Projects were repeated, or abandoned. But there was a continuous stream of weaving. Weavers kept on weaving. Many learned many ways to do the same thing. Mastery of one technique allowed the weaver to become creative in ways beyond technique. Patience and attention span depend on interest in the doing. Joan has never been bored since she started weaving—because there is always something to think about, plan for.

Weavers found ways to make weaving time quality time. They needed opportunity to reflect, to try alternatives, to try again, and to discuss, even disagree. Doing, undoing, redoing is essential, the learning cumulative and developmental, not episodic. Students will design their own learning experiences if they are allowed, and perturbed—by teacher, materials, intrinsic interest, colleagues' achievements, even tools.

Regular, lengthy blocks of time set aside to "work" or "fool with it", exchange ideas, and so on were expressed as important by both the weavers and the teachers at the conference. There was no doubt that "hard work" was part of the process. The weavers wove cloth, were thinking of possible "next" projects before the one on the loom was done. Weavers say, "You have to be warped to weave." You have to be weaving to learn to weave. You have to be learning and doing to learn to do.

Question: Weaving does seems to be product-oriented. We teachers are continuously being criticized for being too involved with the product, as parents expect a finished product to come home as evidence that their child is learning. Also, we are always testing for a finished product. How would you say that weaving points to a new view of curriculum when it is also product-based?

Reply: A weaving product comes from the very real and intense involvement of the weaver. They plan their product, become totally involved with it; it is something they feel

some need to create. And remember, not all weavings become show-able products. There are many, many projects that live their lives in the closet. That is not to say that the weaver did not learn from them. Even the "mistakes", the "failures" are important as part of the learning process. Many times a weaver changes directions, re-thinks, re-designs a product. Even after the cloth is woven, it may become something other than what it was intended to be.

The weaver is not separated from the product or from producing it, is often inspired by one to make several more. Thinking about the wool or the cotton you're using, or about the possibility for more weaving that this weaving implies, makes the process of weaving rich, personal, and creative. Weavers build on what they know, what they have seen, what they are intrigued to know about. This is a view of the weaver/learner as epistemologist, building his/her own knowing. Ideas may arise from an accidental occurrence, from something just being there, from something someone said or did. Often for weavers, it was something related to weaving—loom, coat, piece of wonderfully attractive weaving, or a painting that triggered a response, and became a weaving. No one prescribes for the weavers what they should weave or even that they have to weave. The weavers chose topics (and projects, thus products) a teacher may not have thought to assign. I never would have assigned my student to weave mops! All the weavers chose their topics, their curriculum goals, and these were not related to textbooks, or even magazines, but to their personal expression of Self.

This points to the question of evaluation, as well. Weavers evaluate their technique in terms of mastery of technique, but more important is whether the finished product satisfies them in some way. Many weavings I did not like were bought by someone who thought them beautiful. One weaver put this nicely when she expressed her liking for natural fibers—because they were not permanent. She would make curtains from silk rather than polyester, knowing they were not permanent but enjoying them for what they were, in themselves.

The weavers at the conference came in all ages and size. They were living examples of learning as a life-long process/goal. They continued to learn because they continued to weave. My sense is that if we, as teachers set our teaching goal to promote in our students a lifelong quest for learning, we would have succeeded in teaching an essence required in our fast-changing, constantly evolving society.

Since no more questions were forthcoming, I concluded the formal part of my presentation by inviting the teachers to continue to explore the warped looms as long as they wanted, indicating that I would be willing to share what I knew and would be pleased to learn from their comments and from their learning—if they wanted to share. I noted that there was much talk at the conference about sharing and how we learn from sharing our knowledge (sometimes called teaching) with others. The connections through cooperation could be rich and exciting, though I was left with the sense that the groups needed fluidity, needed to flow, to be able to group and re-group, and to have the freedom to explore what they wanted to study, how long, in what depth, and to what heights.

I was reminded in conclusion, of the dream weavers whose dreams are not finished until the very end. One never knows about a dream until it is done. One never knows about a weaving until it is done. And one certainly never knows about a weaver—what s/he will learn and what s/he will teach. We need set a transparent warp, then get out of the way and let it happen, let it be woven.

References

A+ schools: Portraits of schools that work. (1984, May). Instructor, pp. 18-20.

Aanstoos, C. (1986, May). A comparative survey of human science psychologies. Paper presented at the meeting of the Human Science Research Association, Berkeley, CA.

Adler, M. (1982). The Paideia proposal: An educational manifesto. New York, NY: Macmillan Publishing Company.

Alessi, S., & Trollip, S. (1985). Computer-based instruction: Methods and development. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Alexander, T. M. (1987). John Dewey's theory of art, experience, and nature: The horizons of feeling. Albany, NY: State University of New York Press.

Aoki, T. (1990). Inspiriting the curriculum. The ATA Magazine, 70(2), 37-42.

Ash, J., & Toomey, M. (1989). Is styrofoam necessary for life? Democracy & Education, 3(4), 17-20.

Atwell, N. (1987). In the middle: Writing, reading, and learning with adolescents. Portsmouth, NH: Boynton/Cook Publishers.

Augros, R., & Stanciu, G. (1987). The new biology: Discovering the wisdom in nature. Boston, MA: Shambhala Publications.

Bach, R. (1988). One. New York, NY: William Morrow and Company, Inc.

Barrow, J. (1990). The world within the world. New York, NY: Oxford University Press.

Bateson, G. (1979). Mind and nature: A necessary unity. Toronto, ONT: Bantam Books.

Bateson, G., & Bateson, M. C. (1987). Angels fear: Towards an epistemology of the sacred. Toronto, ONT: Bantam Books.

Beattie, C. (1988). Studying, taming, and exploiting the micro. Journal of Curriculum Studies, 20(2),181-188.

Berman, M. (1984). The reenchantment of the world. Toronto, ONT: Bantam Books.

Black, M. (1981). Metaphor. In M. Johnson (Ed.). Philosophical perspectives in metaphor (pp. 63-82). Minneapolis, MN: University of Minnesota Press.

Bloom (1984). The search for methods of group instruction as effective as one-to-one tutoring. Educational Leadership, May, 4-17.

Boden, M. (1979). Piaget. Sussex, ENG: The Harvester Press.

Bohm, D., & Peat, F. D. (1987). Science, order, and creativity. Toronto, ONT: Bantam Books.

Boyd, R. (1979). Metaphor and theory change: What is "metaphor" a metaphor for? In A. Ortony (Ed.). Metaphor and thought (pp. 356-408). Cambridge, MA: Cambridge University Press.

Briggs, J., & Peat, F. D. (1984). Looking glass universe: The Emerging science of wholeness. New York, NY: Simon & Schuster, Inc.

Briggs, J., & Peat, F. D. (1989). Turbulent mirror. New York, NY: Harper & Row.

Burke, J. (1985). The day the universe changed. Toronto, ONT: Little, Brown, and Company.

Calkins, L. (1983). Lessons from a child: On the teaching and learning of writing. Portsmouth, NH: Heinemann Educational Books.

Capra, F. (1975). The Tao of physics: An exploration of the parallels between modern physics and Eastern mysticism. Glasglow, ENG: Fontana Paperbacks.

Capra, F. (1982). The turning point: Science, society, and the rising culture. Toronto, ONT: Bantam Books.

Capra, F. (1988). Uncommon wisdom: Conversations with remarkable people. Toronto, ONT: Bantam Books.

Carbonell, J. (1982, August). Towards a computational model of metaphor in common sense reasoning. Proceedings of the Fourth Annual Conference of the Cognitive Science Society, Ann Arbor, MI.

Carse, J. (1986). Finite and infinite games. New York, NY: Ballantine Books.

Case, R. (1973). Piaget's theory of child development and its implications. Phi Delta Kappa, LV(1), 20-25.

Courtney, B. (1989). The power of one. Toronto, ONT: Little, Brown and Company (Canada) Limited.

Davies, P. (1983). God and the new physics. New York, NY: Simon & Schuster, Inc.

Dewey, J. (1916). Democracy and education: An introduction to the philosophy of education. New York, NY: The Free Press.

Dewey, J. (1938). Experience and education. New York, NY: Collier Books.

Dick, W., & Carey, L. (1983). The systematic design of instruction. Dallas, TX: Scott Foresman.

Doll, W. (1983). Curriculum and change: Piaget's organismic origins. Journal of Curriculum Theorizing, 5(2), 4-61.

Doll, W. (1986). Prigogine: A new sense of order, a new curriculum. Theory Into Practice, 25(1),10-16.

Doll, W. (1988). Curriculum beyond stability: Schon, Prigogine, Piaget. In W. Pinar (Ed.). Contemporary curriculum discourses (pp. 114-133). Scottsdale, AZ: Gorsuch Scarisbrick.

Doll, W. (preliminary draft). A Post-modern view of curriculum.

Donnan, C. (1988). Following our forebears' footsteps: From expedition to understanding. In V. Rogers, A. Roberts, & T. Weinland (Eds.). Teaching Social Studies: Portraits from the classroom (pp. 1-9). Washington, DC: National Council for the Social Studies.

Eisner, E. W. (1985). The educational imagination: On the design and evaluation of school programs. New York, NY: Macmillan.

Elasky, B., & Wood, G. (1988). Review: Dreikurs, Grunwald and Pepper's Maintaining sanity in the classroom: Classroom management techniques. Democracy & Education, 3(2), 25-28.

Escher, M. C. (1986). Escher on Escher: Exploring the infinite. New York, NY: Harry N. Abrams, Inc.

Fischer, R. (1987). Emergence of mind from brain: The biological roots of the hermeneutic circle. Diogenes, 138,1-25.

Gilmore, E. E. (1986). A lifetime of weaving. Handwoven, 7(2), 18-19.

Gleick, J. (1987). Chaos: Making a new science. Markham, ONT: Penguin Books.

Goodlad, J. (1984). A place called school: Prospects for the future. Toronto, ONT: McGraw-Hill.

Graves, D. (1983). Writing: Teachers and children at work. Exeter, NH: Heinemann Educational Books.

Gruber, H., & Davis, S. (1988). Inching our way up Mount Olympus: the evolving-systems approach to creative thinking. In R. Sternberg (Ed.). The nature of creativity: Contemporary psychological perspectives. Cambridge, MA: Cambridge University Press.

Grumet, M. (1988). Bodyreading. In W. Pinar (Ed.). Contemporary curriculum discourses (pp. 453-474). Scottsdale, AZ: Gorsuch Scarisbrick.

Guba, E. G., & Stufflebeam, D. L. (1970). Evaluation: The process of stimulating, aiding, and abetting insightful action. Indiana: Indiana University.

Hall, J. (1982). Tapestry in twill: a free approach. Handwoven, 3(1), 46-47.

Henderson, H. (1981). The politics of the solar age: Alternatives to economics. Garden City, NY: Anchor Press/Doubleday.

Heyer, M. (1986). The weaving of a dream. New York, NY: Puffin Books

Hofstader, D. (1980). Godel, Escher, Bach: an eternal golden braid. New York, NY: Vintage Books.

Homer, (1963). The Odyssey (R. Fitzgerald, Trans.). New York: Anchor Books. (Original work published 1961)

House, E. R. (1978). Assumptions underlying evaluation models. Educational Researcher, 7(3), 4-12.

Johnson, D. W. & Johnson, R. T., Holubec, E. J., & Roy, P. (1984). Circles of learning: Cooperation in the classroom. Alexandria, VA: Association for Supervision and Curriculum Development.

Johnson, M. (Ed.). (1987). The body in the mind: The bodily basis of meaning, imagination, and reason. Chicago, IL: The University of Chicago Press.

Jardine, D. W. (1987). Reflection and self-understanding in Piagetian theory: A phenomenological critique. The Journal of Educational Thought, 21(1),10-19.

Katz, L., & Chard, S. (1989). Engaging children's minds: The project approach. Norwood, NJ: Ablex Publishing Corporation.

Keller, F., & Sherman, J. G. (1982). The PSI Handbook: Essays on personalized instruction. Lawrence, KS: TRI Publications.

Kilpatrick, J. (1985). Reflection and recursion. Educational Studies in Mathematics, 16, pp. 1-26.

King, C. (Singer and Composer). (1971). Tapestry. [Audio-recording]. New York, NY: Screen Gems-Columbia Music.

Koopman, A. (1983). Albertje Koopman. Handwoven. 4(1), 57-59.

Koopman, E. J., Hunt, E. J., & Cowan, S. D. (1978). Talking together: understanding and facilitating interpersonal communications in the educational setting. Michigan: Behaviordelia, Inc.

Kreisberg, S. (1988). Creating a democratic classroom. Democracy & Education, 3(2),13-19.

Kuhn, T. (1979). Metaphor in science. In A. Ortony (Ed.). Metaphor and thought (pp. 409-419). Cambridge, MA: Cambridge University Press.

Lakoff, G., & Johnson, M. (1980). Metaphors we live by. Chicago, IL: University of Chicago Press.

Lakoff, G., & Johnson, M. (1981). Conceptual metaphor in everyday language. In M. Johnson (Ed.). Philosophical perspectives in metaphor (pp. 286-325.). Minneapolis, MN: University of Minnesota Press.

LaLena, C. (1986). An interview with Albertje Koopman. Handwoven, 7(3), 89-90.

Lawson, H. (1985). Reflexivity: The post-modern predicament. La Salle, IL: Open Court.

Lovelock, J. (1987). Gaia: A new look at life on Earth. Toronto, ONT: Oxford University Press.

Lovelock, J. (1988). The ages of Gaia: A biography of our living earth. Toronto, ONT: Bantam Books.

Lyotard, J. (1979). The postmodern condition: A report on knowledge. Minneapolis, MN: University of Minnesota Press.

MacBeath, B. (1988). The use of metaphor as a tool for systems inquiry. Saybrook Review, 7(1), 55-66.

Martin, J. (1988). Time and the weaver. Handwoven, 9(3), 91.

Mathinos, D., & Woodward, A. (1988). Instructional computing in an elementary school: the rhetoric and reality of an innovation. Journal of Curriculum Studies, 20(5), 465-473.

Maturana, H., & Varela, F. (1987). The tree of knowledge: The biological roots of human understanding. Boston, MA: Shambhala Publications, Inc.

Mayer, A. (1984). Clothing from the hands that weave. Loveland, CO: Interweave Press, Inc.

McNeil, J. (1990). Curriculum: A comprehensive introduction. Glenview, IL: Scott, Foresman/Little, Brown Higher Education.

Mehan, H. (1989). Microcomputers in classrooms: Educational technology or social practice? Anthropology & Education Quarterly, 20(1), 4-22.

Newman, R. G. (1974). Groups in schools. New York, NY: Simon and Schuster.

Nollman, J. (1990). Spiritual ecology: A guide for reconnecting with nature. Toronto, ONT: Bantam Books.

Ornstein, A., & Hunkins, F. (1988). Curriculum: Foundations, principles, and issues. Englewood Cliffs, NJ: Prentice Hall.

Ornstein, R., & Ehrlich, P. (1989). New world, new mind: Moving toward conscious evolution. Toronto, ONT: Simon & Schuster.

Ortony, A. (1979). Metaphor: A multidimensional problem. In A. Ortony (Ed.). Metaphor and thought (pp. 1-18). Cambridge, MA: Cambridge University Press.

Paivio, A. (1979). Psychological processes in the comprehension of metaphor. In A. Ortony (Ed.). Metaphor and thought (pp. 150-171). Cambridge, MA: Cambridge University Press.

Papano, J. (1988). The nature and sources of teacher authority. Journal of Curriculum Theorizing, 7(4), 7-25.

Papert, S. (1980). Mindstorms: Children, computers, and powerful ideas. New York, NY: Basic Books, Inc.

Petrie, H. (1979). Metaphor and learning. In A. Ortony (Ed.). Metaphor and thought (pp. 438-461). Cambridge, MA: Cambridge University Press.

Polanyi, M. (1966). The tacit dimension. Garden City, NY: Doubleday & Company, Inc.

Posner, G., & Rudnitsky, A. N. (1986). Course design: A guide to curriculum development for teachers. White Plains, NY: Longman Inc.

Pratt, D. (1980). Curriculum design and development. New York: Harcourt Brace Jovanovich.

Pratt, D. (1987). The owl, the rose, and the big bang: Curriculum options for the twenty-first century. In Stewin, L. L., & S. J. H. McCann (Eds.) Contemporary educational issues: The Canadian mosaic. Toronto, ONT: Copp Clark Pitman Ltd.

Prigogine, I., & Stengers, I. (1984). Order out of chaos: Man's new dialogue with nature. Toronto, ONT: Bantam Books.

Reagan, C., & Stewart, D. (Eds.). (1978). The philosophy of Paul Ricoeur: An anthology of his work. Boston, MA: Beacon Press.

Reichard, G. (1974). Weaving a Navajo blanket. New York, NY: Dover Publications, Inc.

Reid, M. (1988). Towards an epistemology of the imagination. Saybrook Review, 7(1), 21-32.

Richards, I. A. (1981). The philosophy of rhetoric. In M. Johnson (Ed.). Philosophical perspectives in metaphor (pp. 48-62.). Minneapolis, MN: University of Minnesota Press.

Ricoeur, P. (1975). The rule of metaphor: Multi-disciplinary studies of the creation of meaning in language (R. Czerny, K. McLaughlin, & J. Costello, Trans.). Toronto, ONT: University of Toronto Press.

Ricoeur, P. (1981a). Hermeneutics and the human sciences (J. Thompson, Ed., and Trans.). Cambridge, MA: Cambridge University Press.

Ricoeur, P. (1981b). The metaphorical process as cognition, imagination, and feeling. In M. Johnson (Ed.). Philosophical perspectives in metaphor (pp. 228-246.). Minneapolis, MN: University of Minnesota Press.

Ricoeur, P. (1984). Time and narrative (K. McLaughlin & D. Pellauer, Trans.). Chicago, IL: The University of Chicago Press. (Original work published 1983).

Rivlin, A. M. (1971). Systematic thinking for social action. Washington, DC: The Brookings Institution.

Rogers, V., Roberts, A., & Weinland, T. (Eds.) (1988). Teaching Social Studies: Portraits from the classroom. Washington, DC: National Council for the Social Studies.

Sahtouris, E. (1989). Gaia: The human journey from chaos to cosmos. Toronto, ONT: Pocket Books.

Salner, M. (1986). A course guide for assisting students in the study of metaphor and human understanding. San Francisco, CA: Saybrook Institute.

Salner, M. (1988). Introduction: Metaphor and human understanding. Saybrook Review, 7(1),1-20.

Sawada, D. (1986). New metaphors for creativity in early childhood education. In L. Nosbush & J. Blakey (Eds.). Creativity: Pathway to the future (pp. 68-81). Edmonton, AB: Alberta Teachers' Association.

Sawada, D. (1989, June). Whole mathematics in a language experience approach. Final report to Scholarship and Research Awards Committee.

Sawada, D., & Caley, M. (1985). Dissipative structures: New metaphors for becoming in education. Educational Researcher, 14, 3-19.

Sawada, D., & Young, D. (1989). Aesthetics in Canadian education: A perspective from the East. Canadian Journal of Education, 14(3), 269-276.

Schon, D. (1979). Generative metaphor: A perspective on problem-setting in social policy. In A. Ortony (Ed.). Metaphor and thought (pp. 254-283). Cambridge, MA: Cambridge University Press.

Schubert, W. H. (1986). Curriculum: Perspective, paradigm, and possibility. New York, NY: Macmillan Publishing Company.

Schubert, W. H. (1989). How to deschool schooling: As demonstrated to a sixth grade teacher by the students in his social studies class. Democracy and Education, 3(4), 25-30.

Scriven, M. (1973). Goal-free evaluation. In House, E. R. (Ed.). School evaluation, the politics and process (pp. 319-328). Berkely, CA: McCutchan.

Searle, J. (1989). Minds, brains and science. Cambridge, MA: Harvard University Press.

Slavin, R. E. (1983). Student team learning: An overview and practical guide. Washington, DC: National Education Association.

Smith, D. (1988). Experimental eidetics as a way of entering curriculum language from the ground up. In W. Pinar (Ed.). Contemporary curriculum discourses (pp. 417-136). Scottsdale, AZ: Gorsuch Scarisbrick.

Smith, N. (1981). Metaphors for evaluation. In N. L. Smith (Ed.). Metaphors for evaluation: Sources of new methods. Beverly Hills, CA: Sage Publications.

Snyder, T. (1988, August/September). Tools for teachers. The Computing Teacher, 8-16.

Stecklow, S. (1990, June 12). Meet the new teacher—Super Mario: Professor says video games could play role in education. The Edmonton Journal, p. C7.

Sternberg, R. (1988). The nature of creativity: Contemporary psychological perspectives. New York, NY: Cambridge University Press.

Sticht, T. (1979). Educational uses of metaphor. In A. Ortony (Ed.). Metaphor and thought (pp. 474-485). Cambridge, MA: Cambridge University Press.

Tanner, L. (1988). The path not taken: Dewey's model of inquiry. Curriculum Inquiry, 18(4), 411-479.

Vitale, B. (in press). Elusive recursion: A trip in recursive land. New Ideas in Psychology, 4.

von Foerster, H. (1981). Observing systems. Seaside, CA: Intersystems Publications.

Wang, M. C., Nojan, M., Strom, C. D., & Walberg, H. J. (1984). The utility of degree of implementation measures in program implementation and evaluation research. Curriculum Inquiry, 14(3), 249-285.

Werner, W. (1984). Evaluation: Sense-making of school programs. In Aoki, T. T. (Ed.). Curriculum evaluation in a new key, (pp. 20-39). Edmonton, AB: University of Alberta, Department of Secondary Education.

Werner, W. (1988). Program implementation and experienced time. Alberta Journal of Educational Research, 34 (2), 90-108.

West, V. (1988). Weaving is more than throwing a shuttle: Creativity and personal reflections. Handwoven, 9(3), 55-56.

Whitehead, A. N. (1929). The aims of education and other essays. New York, NY: The Free Press.

Wigginton, E. (1986). Sometimes a shining moment: The Foxfire experience. Garden City, NY: Anchor Press/Doubleday.

Wigginton, E. (1988). What kind of project should we do? Democracy and Education, 3(1),1-9.

Willis, G. (1975). Curriculum theory and the context of curriculum. In W. Pinar (Ed.). Curriculum theorizing: The reconceptualists, (pp. 427-444). Berkeley, CA: McCutchan.

Willis, G. (1978) (Ed.). Qualitative evaluation: Concepts and cases in curriculum criticism. Berkeley, CA: McCutchan Publishing Corporation.

Wood, G. (1988). Education in Appalachia: Power, powerlessness and the school curriculum. Journal of Curriculum Theorizing, 7(4), 27-64.

Yolen, J. (1978). Dream weaver. New York, NY: Philomel Books.

Zeleny, M. (1985). Spontaneous social orders. International Journal of General Systems, 11,117-131.

Appendix A

Checkland's Methodology

(MacBeath, 1988, p. 56-57)

"Checkland has devised a methodology that can be classified as 'action research' because it results in both a description of a system and enables participants within the system to use that description to effect change in the system. Checkland's methodology was designed to identify both the special characteristics of a particular human system and how that system could be improved, modified, or redesigned. A system is initially identified in terms of its relationship to a particular, although initially poorly understood, problem situation. The methodology contains seven stages to help system members identify characteristics of a system in which they participate, and design and implement desired changes. Through the following stages, individuals within a common system:

1) Articulate their unique perception of problems they experience in relation to that system;

2) Generate a shared perspective regarding problems with that system;

3) Translate the shared perspective into systems terms;

4) Design conceptual models of the system;

5) Discuss contrasting models and identify desirable and feasible changes;

6) Design strategies to achieve those changes;

7) Implement the selected strategies.

The stages are circular with resulting changes due to how problems are experienced, changes which become the foundation for a new procession through these stages."